```
;       ATTORNEY/AGENT INFORMATION:
;            NAME: Borun, Michael F.
;            REGISTRATION NUMBER: 25,447
;            REFERENCE/DOCKET NUMBER: 27129/33199
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 312/474-6300
;            TELEFAX: 312/474-0448
;            TELEX: 25-3856
;   INFORMATION FOR SEQ ID NO: 150:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 13 amino acids
;            TYPE: amino acid
;            TOPOLOGY: linear
;       MOLECULE TYPE: peptide
;       FEATURE:
;            NAME/KEY:  misc_feature
;            OTHER INFORMATION:  "XMP.284"
;       FEATURE:
;            NAME/KEY:  Modified-site
;            LOCATION:  C-Terminus
;            OTHER INFORMATION:  /label= Amidation
;            /note= "The C-Terminus is Amidated."
;       SEQUENCE DESCRIPTION: SEQ ID NO: 150:
US-09-765-527-150

  Query Match           100.0%;  Score 57;  DB 9;  Length 13;
  Best Local Similarity  100.0%;  Pred. No. 0.0027;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          4 KWLIQLFHKK 13


RESULT 19
US-09-881-490-117
; Sequence 117, Application US/09881490
; Patent No. US20020077298A1
;   GENERAL INFORMATION:
;       APPLICANT: Little II, Roger G.
;                  Lim, Edward
;                  Fadem, Mitchell B.
;       TITLE OF INVENTION: Anti-Fungal Peptides
;       NUMBER OF SEQUENCES: 211
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: McAndrews, Held & Malloy, Ltd.
;            STREET: 500 West Madison Street, 34th FloorDrive
;            CITY: Chicago
;            STATE: Illinois
;            COUNTRY: United States of America
;            ZIP: 60661
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Floppy disk
;            COMPUTER: IBM PC compatible
;            OPERATING SYSTEM: PC-DOS/MS-DOS
;            SOFTWARE: PatentIn Release #1.0, Version #1.25
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/09/881,490
;            FILING DATE: 14-Jun-2001
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: 09/119,858
;            FILING DATE: <Unknown>
;            APPLICATION NUMBER: 08/372,105
;            FILING DATE: 13-JAN-95
;            APPLICATION NUMBER: 08/306,473
;            FILING DATE: 15-SEP-94
;            APPLICATION NUMBER: 08/273,540
;            FILING DATE: 11-JUL-94
;            APPLICATION NUMBER: 08/209,762
;            FILING DATE: 11-MAR-94
;            APPLICATION NUMBER: 08/183,222
;            FILING DATE: 14-JAN-94
;            APPLICATION NUMBER: 08/093,202
;            FILING DATE: 15-JUL-93
;            APPLICATION NUMBER: 08/030,644
;            FILING DATE: 12-MAR-93
;       ATTORNEY/AGENT INFORMATION:
;            NAME: McNicholas, Janet M.
;            REGISTRATION NUMBER: 32,918
;            REFERENCE/DOCKET NUMBER: 100-238/11021US01
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 312/707-8889
;            TELEFAX: 312/707-9155
;            TELEX: 650 388-1248
;   INFORMATION FOR SEQ ID NO: 117:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 13 amino acids
;            TYPE: amino acid
;            TOPOLOGY: linear
;       MOLECULE TYPE: peptide
;       FEATURE:
;            NAME/KEY:  misc_feature
;            OTHER INFORMATION:  "XMP.284"
;       FEATURE:
;            NAME/KEY:  Modified-site
;            LOCATION:  C-Terminus
;            OTHER INFORMATION:  /label= Amidation
;            /note= "The C-Terminus is Amidated"
;       SEQUENCE DESCRIPTION: SEQ ID NO: 117:
US-09-881-490-117

  Query Match           100.0%;  Score 57;  DB 9;  Length 13;
  Best Local Similarity  100.0%;  Pred. No. 0.0027;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          4 KWLIQLFHKK 13


RESULT 20
US-09-765-527-86
; Sequence 86, Application US/09765527
; Patent No. US20020006638A1
;   GENERAL INFORMATION:
;       APPLICANT: Better, Marc D.
;       TITLE OF INVENTION: Methods for Recombinant Microbial Production of
;                           Fusion Proteins and BPI-Derived Peptides
;       NUMBER OF SEQUENCES: 265
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
;            STREET: 6300 Sears Tower, 233 South Wacker Drive
;            CITY: Chicago
;            STATE: Illinois
;            COUNTRY: United States of America
;            ZIP: 60606-6402
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Floppy disk
;            COMPUTER: IBM PC compatible
;            OPERATING SYSTEM: PC-DOS/MS-DOS
;            SOFTWARE: PatentIn Release #1.0, Version #1.25
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/09/765,527
;            FILING DATE: 18-Jan-2001
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: 08/621,803
;            FILING DATE: <Unknown>
;       ATTORNEY/AGENT INFORMATION:
;            NAME: Borun, Michael F.
;            REGISTRATION NUMBER: 25,447
;            REFERENCE/DOCKET NUMBER: 27129/33199
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 312/474-6300
;            TELEFAX: 312/474-0448
;            TELEX: 25-3856
;   INFORMATION FOR SEQ ID NO: 86:
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;         SEQUENCE CHARACTERISTICS:
;              LENGTH: 14 amino acids
;              TYPE: amino acid
;              TOPOLOGY: linear
;         MOLECULE TYPE: peptide
;         FEATURE:
;              NAME/KEY:  misc_feature
;              OTHER INFORMATION:  "XMP.97"
;         FEATURE:
;              NAME/KEY:  Modified-site
;              LOCATION:  C-Terminus
;              OTHER INFORMATION:  /label= Amidation
;              /note= "The C-Terminus is Amidated."
;         SEQUENCE DESCRIPTION: SEQ ID NO: 86:
US-09-765-527-86

  Query Match             100.0%;  Score 57;  DB 6;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 0.0029;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          5 KWLIQLFHKK 14


RESULT 21
US-09-881-490-31
; Sequence 31, Application US/09881490
; Patent No. US20020077298A1
;   GENERAL INFORMATION:
;         APPLICANT: Little II, Roger G.
;                    Lim, Edward
;                    Fadem, Mitchell B.
;         TITLE OF INVENTION: Anti-Fungal Peptides
;         NUMBER OF SEQUENCES: 211
;         CORRESPONDENCE ADDRESS:
;              ADDRESSEE: McAndrews, Held & Malloy, Ltd.
;              STREET: 500 West Madison Street, 34th Floorfrive
;              CITY: Chicago
;              STATE: Illinois
;              COUNTRY: United States of America
;              ZIP: 60661
;         COMPUTER READABLE FORM:
;              MEDIUM TYPE: Floppy disk
;              COMPUTER: IBM PC compatible
;              OPERATING SYSTEM: PC-DOS/MS-DOS
;              SOFTWARE: PatentIn Release #1.0, Version #1.25
;         CURRENT APPLICATION DATA:
;              APPLICATION NUMBER: US/09/881,490
;              FILING DATE: 14-Jun-2001
;         PRIOR APPLICATION DATA:
;              APPLICATION NUMBER: 09/119,858
;              FILING DATE: <Unknown>
;              APPLICATION NUMBER: 08/372,105
;              FILING DATE: 13-JAN-95
;              APPLICATION NUMBER: 08/306,473
;              FILING DATE: 15-SEP-94
;              APPLICATION NUMBER: 08/273,540
;              FILING DATE: 11-JUL-94
;              APPLICATION NUMBER: 08/209,762
;              FILING DATE: 11-MAR-94
;              APPLICATION NUMBER: 08/183,222
;              FILING DATE: 14-JAN-94
;              APPLICATION NUMBER: 08/093,202
;              FILING DATE: 15-JUL-93
;              APPLICATION NUMBER: 08/030,644
;              FILING DATE: 12-MAR-93
;         ATTORNEY/AGENT INFORMATION:
;              NAME: McNicholas, Janet M.
;              REGISTRATION NUMBER: 32,918
;              REFERENCE/DOCKET NUMBER: 100-238/11021US01
;         TELECOMMUNICATION INFORMATION:
;              TELEPHONE: 312/707-8889
;              TELEFAX: 312/707-9155
;              TELEX: 650 388-1248
;    INFORMATION FOR SEQ ID NO: 31:
;         SEQUENCE CHARACTERISTICS:
;              LENGTH: 14 amino acids
;              TYPE: amino acid
;              TOPOLOGY: linear
;         MOLECULE TYPE: peptide
;         FEATURE:
;              NAME/KEY:  misc_feature
;              OTHER INFORMATION:  "XMP.97"
;         FEATURE:
;              NAME/KEY:  Modified-site
;              LOCATION:  C-Terminus
;              OTHER INFORMATION:  /label= Amidation
;              /note= "The C-Terminus is Amidated"
;         SEQUENCE DESCRIPTION: SEQ ID NO: 31:
US-09-881-490-31

  Query Match             100.0%;  Score 57;  DB 9;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 0.0029;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          5 KWLIQLFHKK 14


Search completed: October  1, 2003, 09:51:11
Job time : 578 secs
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GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: October 1, 2003, 09:06:03 ; Search time 15 Seconds
(without alignments)
64.112 Million cell updates/sec

Title: US-09-881-490-126
Perfect score: 57
Sequence: 1 KWLIQLFHKK 10

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283308 seqs, 96168682 residues

Total number of hits satisfying chosen parameters: 283308

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR_76:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	52	91.2	250	4	S43383	bactericidal/perme
2	52	91.2	487	2	A30909	bactericidal/perme
3	43	75.4	146	2	B86721	transcription regu
4	42	73.7	221	2	G83998	mutants block spor
5	41	71.9	482	2	S10180	bactericidal perme
6	41	71.9	1483	2	S42839	T16J12.5 protein -
7	40	70.2	290	2	C48547	nonstructural prot
8	40	70.2	3224	1	S58884	Ran-binding protei
9	37	64.9	512	2	S21171	activin receptor 2
10	37	64.9	513	1	JQ1486	activin receptor 1
11	37	64.9	513	2	S23089	activin receptor t
12	37	64.9	513	2	A39896	activin receptor p
13	37	64.9	513	2	A49193	type II activin re
14	37	64.9	513	2	S27258	activin receptor t
15	37	64.9	513	2	I45850	activin receptor t
16	37	64.9	514	2	JQ1317	activin receptor p
17	37	64.9	993	2	C31915	lantibiotic nisin
18	36.5	64.0	684	2	T12147	NADH2 dehydrogenas
19	36	63.2	152	2	B38196	probable RNA-direc
20	36	63.2	230	2	D70658	hypothetical prote
21	36	63.2	246	2	H85955	probable transposa
22	36	63.2	296	2	E91110	probable transposa
23	36	63.2	342	2	T33438	hypothetical prote
24	36	63.2	473	2	S41709	mitosis-specific c
25	36	63.2	477	2	A35843	lipopolysaccharide
26	36	63.2	481	2	A54136	lipopolysaccharide
27	36	63.2	481	2	I56246	lipopolysaccharide
28	36	63.2	537	2	S26857	isocitrate lyase (
29	36	63.2	555	2	S39953	isocitrate lyase (
30	36	63.2	568	2	S42225	major envelope gly
31	36	63.2	684	2	H96646	hypothetical prote
32	36	63.2	684	2	T02149	hypothetical prote
33	36	63.2	1171	2	S57829	genome polyprotein
34	36	63.2	1480	2	T21911	hypothetical prote
35	36	63.2	1483	2	T21912	hypothetical prote
36	36	63.2	1483	2	T21914	hypothetical prote
37	36	63.2	1579	2	S59801	protein kinase SSK
38	36	63.2	1693	1	MNWWHE	genome polyprotein
39	36	63.2	3898	1	GNWVHC	genome polyprotein
40	36	63.2	3898	1	GNWVHB	genome polyprotein
41	36	63.2	3898	2	S57437	genome polyprotein
42	36	63.2	3898	2	S58295	polyprotein - hog
43	35.5	62.3	505	2	C72064	glutamate-tRNA lig
44	35.5	62.3	505	2	D86560	glutamyl-tRNA synt
45	35	61.4	66	2	JN0652	hypothetical 8K pr

ALIGNMENTS

RESULT 1
S43383
bactericidal/permeability-increasing protein - synthetic
C;Species: synthetic
A;Note: Homo sapiens (man) gene engineered and expressed in Escherichia coli
C;Date: 20-Oct-1994 #sequence_revision 15-Feb-1996 #text_change 15-Feb-1996
C;Accession: S43383
R;Qi, S.Y.; Li, Y.; O'Connor, C.D.
Biochem. J. 298, 711-718, 1994
A;Title: The region around residue 115 of human bactericidal/permeability-increasing
of a gene coding for the active domain and characterization of recombinant proteins.
A;Reference number: S43383
A;Accession: S43383
A;Molecule type: DNA
A;Residues: 1-250 <QIS>

Query Match 91.2%; Score 52; DB 4; Length 250;
Best Local Similarity 100.0%; Pred. No. 0.03;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 WLIQLFHKK 10
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Db 154 WLIQLFHKK 162

RESULT 2
A30909
bactericidal/permeability-increasing protein precursor - human
N;Alternate names: 55K bactericidal protein
C;Species: Homo sapiens (man)
C;Date: 18-Apr-1989 #sequence_revision 18-Apr-1989 #text_change 20-Aug-1999
C;Accession: A33850; B54136; A29464; A43600; A49716; A30909
R;Gray, P.W.; Flaggs, G.; Leong, S.R.; Gumina, R.J.; Weiss, J.; Ooi, C.E.; Elsbach, P
J. Biol. Chem. 264, 9505-9509, 1989
A;Title: Cloning of the cDNA of a human neutrophil bactericidal protein. Structural a
A;Reference number: A33850; MUID:89255455; PMID:2722846
A;Accession: A33850
A;Molecule type: mRNA
A;Residues: 1-487 <GRA>
A;Cross-references: GB:J04739; NID:g179528; PIDN:AAA51841.1; PID:g179529
R;Wilde, C.G.; Seilhamer, J.J.; McGrogan, M.; Ashton, N.; Snable, J.L.; Lane, J.C.; I
J. Biol. Chem. 269, 17411-17416, 1994
A;Title: Bactericidal/permeability-increasing protein and lipopolysaccharide (LPS)-bi
A;Reference number: A54136; MUID:94292492; PMID:7517398
A;Accession: B54136
A;Status: nucleic acid sequence not shown; not compared with conceptual translation
A;Molecule type: mRNA
A;Residues: 1-374,'L',376-487 <WIL>
A;Experimental source: HL-60 cells
A;Note: sequence extracted from NCBI backbone (NCBIP:149855)
R;Ooi, C.E.; Weiss, J.; Elsbach, P.; Frangione, B.; Mannion, B.
J. Biol. Chem. 262, 14891-14894, 1987

A;Title: A 25-kDa amino-terminal fragment carries all the antibacterial activities of th
A;Reference number: A29464; MUID:88033057; PMID:3667613
A;Accession: A29464
A;Molecule type: protein
A;Residues: 32-51 <OOI>
A;Experimental source: neutrophils
R;Wasiluk, K.R.; Skubitz, K.M.; Gray, B.H.
Infect. Immun. 59, 4193-4200, 1991
A;Title: Comparison of granule proteins from human polymorphonuclear leukocytes which an
A;Reference number: A43600; MUID:92040097; PMID:1937776
A;Accession: A43600
A;Molecule type: protein
A;Residues: 32-52,'R' <WAS>
R;Little, R.G.; Kelner, D.N.; Lim, E.; Burke, D.J.; Conlon, P.J.
J. Biol. Chem. 269, 1865-1872, 1994
A;Title: Functional domains of recombinant bactericidal/permeability increasing protein
A;Reference number: A49716; MUID:94124531; PMID:8294435
A;Accession: A49716
A;Molecule type: protein
A;Residues: 32-130;132-141;143-165;202-215,'E',217-225 <LIT>
C;Comment: The bactericidal/permeability-increasing protein (BPI) is a 60 kD membrane-as
which is specific for gram-negative bacteria. BPI has a high affinity for lipopolysaccha
between BPI and an LPS-binding protein from liver and cholesteryl ester transfer protein
C;Genetics:
A;Gene: GDB:BPI
A;Cross-references: GDB:131572; OMIM:109195
A;Map position: 20q11.23-20q12
C;Superfamily: lipopolysaccharide-binding protein
C;Keywords: antibacterial; cytotoxin; glycoprotein; heparin binding; neutrophil
F;1-31/Domain: signal sequence #status predicted <SIG>
F;32-487/Product: bactericidal permeability-increasing protein #status predicted <MAT>
F;32-51/Region: bactericidal #status predicted
F;380/Binding site: carbohydrate (Asn) (covalent) #status predicted

  Query Match 91.2%; Score 52; DB 2; Length 487;
  Best Local Similarity 100.0%; Pred. No. 0.058;
  Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 WLIQLFHKK 10
|||||||||
Db 184 WLIQLFHKK 192

RESULT 3
B86721
transcription regulator [imported] - Lactococcus lactis subsp. lactis (strain IL1403)
C;Species: Lactococcus lactis subsp. lactis
C;Date: 23-Mar-2001 #sequence_revision 23-Mar-2001 #text_change 03-Aug-2001
C;Accession: B86721
R;Bolotin, A.; Wincker, P.; Mauger, S.; Jaillon, O.; Malarme, K.; Weissenbach, J.; Ehrli
Genome Res. 11, 731-753, 2001
A;Title: The complete genome sequence of the lactic acid bacterium Lactococcus lactis ss
A;Reference number: A86625; MUID:21235186; PMID:11337471
A;Accession: B86721
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-146 <STO>
A;Cross-references: GB:AE005176; PID:g12723685; PIDN:AAK04868.1; GSPDB:GN00140
A;Experimental source: strain IL1403
C;Genetics:
A;Gene: rmaG

  Query Match 75.4%; Score 43; DB 2; Length 146;
  Best Local Similarity 87.5%; Pred. No. 0.86;
  Matches 7; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFH 8
:|||||||
Db 10 EWLIQLFH 17

RESULT 4
G83998
mutants block sporulation after engulfment spoIIIAG [imported] - Bacillus halodurans
C;Species: Bacillus halodurans
C;Date: 01-Dec-2000 #sequence_revision 01-Dec-2000 #text_change 15-Jun-2001
C;Accession: G83998
R;Takami, H.; Nakasone, K.; Takaki, Y.; Maeno, G.; Sasaki, R.; Masui, N.; Fuji, F.; H
Nucleic Acids Res. 28, 4317-4331, 2000
A;Title: Complete genome sequence of the alkaliphilic bacterium Bacillus halodurans a
A;Reference number: A83650; MUID:20512582; PMID:11058132
A;Accession: G83998
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-221 <STO>
A;Cross-references: GB:AP001516; GB:BA000004; NID:g10175192; PIDN:BAB06510.1; GSPDB:G
A;Experimental source: strain C-125
C;Genetics:
A;Gene: spoIIIAG

  Query Match 73.7%; Score 42; DB 2; Length 221;
  Best Local Similarity 70.0%; Pred. No. 2;
  Matches 7; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
:|| :|||||
Db 10 QWLKKLFHKK 19

RESULT 5
S10180
bactericidal permeability-increasing protein precursor - bovine
C;Species: Bos primigenius taurus (cattle)
C;Date: 31-Dec-1990 #sequence_revision 31-Dec-1990 #text_change 20-Aug-1999
C;Accession: S10180
R;Leong, S.R.; Camerato, T.
Nucleic Acids Res. 18, 3052, 1990
A;Title: Nucleotide sequence of the bovine bactericidal permeability increasing protc
A;Reference number: S10180; MUID:90272416; PMID:2349103
A;Accession: S10180
A;Molecule type: mRNA
A;Residues: 1-482 <LEO>
A;Cross-references: EMBL:X52563; NID:g138; PIDN:CAA36797.1; PID:g139
C;Superfamily: lipopolysaccharide-binding protein
F;1-26/Domain: signal sequence #status predicted <SIG>
F;27-482/Product: bactericidal permeability increasing protein #status predicted <MAT

  Query Match 71.9%; Score 41; DB 2; Length 482;
  Best Local Similarity 77.8%; Pred. No. 6.7;
  Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 2 WLIQLFHKK 10
|||||| :
Db 179 WLIQLFRKR 187

RESULT 6
S42839
T16G12.5 protein - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 24-Nov-1999
C;Accession: S42839
R;Thomas, K.
submitted to the EMBL Data Library, February 1994
A;Reference number: S42839
A;Accession: S42839
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-1483 <THO>
A;Cross-references: EMBL:Z30317; NID:g457454; PID:g457457
C;Genetics:
A;Introns: 91/3; 127/3; 161/1; 282/3; 345/2; 474/3; 515/2; 538/1; 555/3; 782/1; 979/1
C;Superfamily: Caenorhabditis elegans T16G12.5 protein

  Query Match 71.9%; Score 41; DB 2; Length 1483;
  Best Local Similarity 77.8%; Pred. No. 20;

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  Matches    7;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHK 9
              |.| |:|||
Db       1384 KWLGQVFHK 1392


RESULT 7
C48547
nonstructural protein - hepatitis E virus (strain Tashkent) (fragment)
C;Species: hepatitis E virus
C;Date: 17-Feb-1994 #sequence_revision 17-Feb-1994 #text_change 20-Sep-1999
C;Accession: C48547
R;Fry, K.E.; Tam, A.W.; Smith, M.M.; Kim, J.P.; Luk, K.C.; Young, L.M.; Platak, M.; Feld
Virus Genes 6, 173-185, 1992
A;Title: Hepatitis E virus (HEV): strain variation in the nonstructural gene region enco
A;Reference number: A48547; MUID:92271462; PMID:1589964
A;Accession: C48547
A;Molecule type: genomic RNA
A;Residues: 1-290 <FRY>
A;Cross-references: GB:L10337; NID:g291457; PIDN:AAA45733.1; PID:g291456
A;Note: sequence extracted from NCBI backbone (NCBIN:104577, NCBIP:104580)
C;Superfamily: hepatitis E virus nonstructural protein
C;Keywords: ATP; nonstructural protein

  Query Match             70.2%;  Score 40;  DB 2;  Length 290;
  Best Local Similarity   75.0%;  Pred. No. 6.3;
  Matches    6;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFH 8
              |:|:|:|:.
Db        149 KWLIRLYH 156


RESULT 8
S58884
Ran-binding protein 2 - human
N;Alternate names: giant nucleopore protein Nup358; nucleoporin Nup358; RanBP2 protein
C;Species: Homo sapiens (man)
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 21-Jul-2000
C;Accession: S58884; A57545
R;Yokoyama, N.; Hayashi, N.; Seki, T.; Pante, N.; Ohba, T.; Nishii, K.; Kuma, K.; Hayash
Nature 376, 184-188, 1995
A;Title: A giant nucleopore protein that binds Ran/TC4.
A;Reference number: S58884; MUID:95327194; PMID:7603572
A;Accession: S58884
A;Status: nucleic acid sequence not shown
A;Molecule type: mRNA
A;Residues: 1-3224 <YOK>
A;Cross-references: EMBL:D42063; NID:g924266; PIDN:BAA07662.1; PID:g1009337
A;Experimental source: cell type B-lymphocyte
R;Wu, J.; Matunis, M.J.; Kraemer, D.; Blobel, G.; Coutavas, E.
J. Biol. Chem. 270, 14209-14213, 1995
A;Title: Nup358, a cytoplasmically exposed nucleoporin with peptide repeats, Ran-GTP bin
A;Reference number: A57545; MUID:95294031; PMID:7775481
A;Accession: A57545
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-776,'R',778-783,'R',785-3224 <WUA>
A;Cross-references: GB:L41840; NID:g857367; PIDN:AAC41756.1; PID:g857368
A;Experimental source: cell line HeLa
C;Genetics:
A;Gene: GDB:RANBP2; NUP358
A;Cross-references: GDB:4642758; OMIM:601181
A;Map position: 2cen-2q13
C;Function:
A;Description: may play a role in nuclear protein import
C;Superfamily: nucleoporin Nup358; cyclophilin homology; tetratricopeptide repeat homol
C;Keywords: leucine zipper
F;26-59/Domain: tetratricopeptide repeat homology <TT1>
F;60-93/Domain: tetratricopeptide repeat homology <TT2>
F;450-471/Domain: leucine zipper #status predicted <LEU>
F;3063-3224/Domain: cyclophilin homology <CYP>

  Query Match             70.2%;  Score 40;  DB 1;  Length 3224;
  Best Local Similarity   87.5%;  Pred. No. 68;
  Matches    7;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFH 8
              ||| |.||
Db        455 KWLKQLFH 462


RESULT 9
S21171
activin receptor STK9 - African clawed frog
C;Species: Xenopus laevis (African clawed frog)
C;Date: 22-Nov-1993 #sequence_revision 10-Nov-1995 #text_change 28-Feb-1997
C;Accession: S21171
R;Nishimatsu, S.; Oda, S.; Murakami, K.; Ueno, N.
FEBS Lett. 303, 81-84, 1992
A;Title: Multiple genes for Xenopus activin receptor expressed during early embryoge
A;Reference number: S21171; MUID:92275088; PMID:1317302
A;Accession: S21171
A;Molecule type: mRNA
A;Residues: 1-512 <NIS>
C;Superfamily: activin receptor II; protein kinase homology
C;Keywords: ATP
F;189-485/Domain: protein kinase homology <KIN>

  Query Match             64.9%;  Score 37;  DB 2;  Length 512;
  Best Local Similarity   66.7%;  Pred. No. 40;
  Matches    6;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          2 WLIQLFHKK 10
              |||  ||:|
Db        263 WLITTFHEK 271


RESULT 10
JQ1486
activin receptor II precursor - human
N;Contains: serine/threonine-specific protein kinase (EC 2.7.1.-)
C;Species: Homo sapiens (man)
C;Date: 17-Jul-1992 #sequence_revision 19-Oct-1995 #text_change 21-Jul-2000
C;Accession: JQ1486; S18908; S22345
R;Donaldson, C.J.; Mathews, L.S.; Vale, W.W.
Biochem. Biophys. Res. Commun. 184, 310-316, 1992
A;Title: Molecular cloning and binding properties of the human type II activin recept
A;Reference number: JQ1486; MUID:92231944; PMID:1314589
A;Accession: JQ1486
A;Molecule type: mRNA
A;Residues: 1-513 <DON>
A;Cross-references: GB:M93415; NID:g178049; PIDN:AAA35504.1; PID:g178050
A;Experimental source: testis
R;Geiser, A.G.
submitted to the EMBL Data Library, December 1991
A;Reference number: S18908
A;Accession: S18908
A;Molecule type: mRNA
A;Residues: 1-513 <GEI>
A;Cross-references: EMBL:X62381; NID:g28347; PIDN:CAA44245.1; PID:g28348
A;Experimental source: mammary gland epithelial cell line B5-589
R;Matzuk, M.M.; Bradley, A.
Biochim. Biophys. Acta 1130, 105-108, 1992
A;Title: Cloning of the human activin receptor cDNA reveals high evolutionary conserv
A;Reference number: S22345; MUID:92182002; PMID:1311955
A;Accession: S22345
A;Molecule type: mRNA
A;Residues: 1-513 <MAT2>
A;Cross-references: EMBL:X63128; NID:g3928172; PIDN:CAA44839.1; PID:g28350
C;Comment: This protein binds activin A.
C;Genetics:
A;Gene: GDB:ACVR2
A;Cross-references: GDB:132411
A;Map position: 11q13-11q13
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```
C;Superfamily: activin receptor II; protein kinase homology
C;Keywords: ATP; glycoprotein; phosphotransferase; receptor; serine/threonine-specific p
F;1-19/Domain: signal sequence #status predicted <SIG>
F;20-513/Product: activin receptor II #status predicted <MAT>
F;20-138/Domain: extracellular #status predicted <EXT>
F;139-160/Domain: transmembrane #status predicted <TM1>
F;161-513/Domain: intracellular #status predicted <INT>
F;190-486/Domain: protein kinase homology <KIN>
F;199-206/Region: protein kinase ATP-binding motif
F;43,66/Binding site: carbohydrate (Asn) (covalent) #status predicted
F;219/Active site: Lys #status predicted

  Query Match             64.9%;  Score 37;  DB 1;  Length 513;
  Best Local Similarity   66.7%;  Pred. No. 40;
  Matches    6;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          2 WLIQLFHKK 10
              ||:  | :|
Db        264 WLITAFHEK 272


RESULT 11
S23089
activin receptor type IIA - chicken
C;Species: Gallus gallus (chicken)
C;Date: 22-Nov-1993 #sequence_revision 10-Nov-1995 #text_change 20-Jan-2000
C;Accession: S23089
R;Ohuchi, H.; Noji, S.; Koyama, E.; Myokai, F.; Nishikawa, K.; Nohno, T.; Tashiro, K.; S
FEBS Lett. 303, 185-189, 1992
A;Title: Expression pattern of the activin receptor type IIA gene during differentiation
A;Reference number: S23089; MUID:92299088; PMID:1318847
A;Accession: S23089
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-513 <OHU>
A;Cross-references: GB:D31899; NID:g505347; PIDN:BAA06697.1; PID:g505548
C;Superfamily: activin receptor II; protein kinase homology
C;Keywords: ATP
F;190-486/Domain: protein kinase homology <KIN>

  Query Match             64.9%;  Score 37;  DB 2;  Length 513;
  Best Local Similarity   66.7%;  Pred. No. 40;
  Matches    6;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          2 WLIQLFHKK 10
              |:|  ||:|
Db        264 WLITAFHEK 272


RESULT 12
A39896
activin receptor precursor - mouse
C;Species: Mus musculus (house mouse)
C;Date: 24-Jan-1992 #sequence_revision 24-Jan-1992 #text_change 18-Jun-1999
C;Accession: A39896
R;Mathews, L.S.; Vale, W.W.
Cell 65, 973-982, 1991
A;Title: Expression cloning of an activin receptor, a predicted transmembrane serine kin
A;Reference number: A39896; MUID:91256317; PMID:1646080
A;Accession: A39896
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-513 <MAT>
A;Cross-references: GB:M65287; NID:g191663; PIDN:AAA37171.1; PID:g191664
C;Superfamily: activin receptor II; protein kinase homology
C;Keywords: ATP; receptor; serine/threonine-specific protein kinase; transmembrane prote
F;190-486/Domain: protein kinase homology <KIN>

  Query Match             64.9%;  Score 37;  DB 2;  Length 513;
  Best Local Similarity   66.7%;  Pred. No. 40;
  Matches    6;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          2 WLIQLFHKK 10
              |||  ||:|
Db        264 WLITAFHEK 272


RESULT 13
A49193
type II activin receptor ActRII - rat (fragment)
C;Species: Rattus norvegicus (Norway rat)
C;Date: 19-Dec-1993 #sequence_revision 18-Nov-1994 #text_change 23-May-1997
C;Accession: A49193
R;Feng, Z.M.; Madigan, M.B.; Chen, C.L.
Endocrinology 132, 2593-2600, 1993
A;Title: Expression of type II activin receptor genes in the male and female reproduc
A;Reference number: A49193; MUID:93279247; PMID:7916681
A;Accession: A49193
A;Status: preliminary
A;Molecule type: nucleic acid
A;Residues: 1-513 <FEN>
A;Note: sequence extracted from NCBI backbone (NCBIN:133008, NCBIP:133009)
C;Superfamily: activin receptor II; protein kinase homology
C;Keywords: ATP; receptor
F;190-486/Domain: protein kinase homology <KIN>

  Query Match             64.9%;  Score 37;  DB 2;  Length 513;
  Best Local Similarity   66.7%;  Pred. No. 40;
  Matches    6;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          2 WLIQLFHKK 10
              :||  ||:|
Db        264 WLITAFHEK 272


RESULT 14
S27258
activin receptor type II - rat
C;Species: Rattus norvegicus (Norway rat)
C;Date: 22-Nov-1993 #sequence_revision 10-Nov-1995 #text_change 18-Jun-1999
C;Accession: S27258
R;Shinozaki, H.; Ito, I.; Hasegawa, Y.; Nakamura, K.; Igarashi, S.; Nakamura, M.; Miy
FEBS Lett. 312, 53-56, 1992
A;Title: Cloning and sequencing of a rat type II activin receptor.
A;Reference number: S27258; MUID:93050162; PMID:1385212
A;Accession: S27258
A;Molecule type: mRNA
A;Residues: 1-513 <SHI>
A;Cross-references: GB:S48190; NID:g258941; PIDN:AAB23958.1; PID:g258942
C;Superfamily: activin receptor II; protein kinase homology
C;Keywords: ATP; receptor
F;190-486/Domain: protein kinase homology <KIN>

  Query Match             64.9%;  Score 37;  DB 2;  Length 513;
  Best Local Similarity   66.7%;  Pred. No. 40;
  Matches    6;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          2 WLIQLFHKK 10
              |||  ||:|
Db        264 WLITAFHEK 272


RESULT 15
I45850
activin receptor type II - bovine
C;Species: Bos primigenius taurus (cattle)
C;Date: 15-Oct-1996 #sequence_revision 15-Oct-1996 #text_change 18-Jun-1999
C;Accession: I45850
R;Ethier, J.F.; Houde, A.; Lussier, J.G.; Silversides, D.W.
Mol. Cell. Endocrinol. 106, 1-8, 1994
A;Title: Bovine activin receptor type II cDNA: cloning and tissue expression.
A;Reference number: I45850; MUID:95203477; PMID:7534730
A;Accession: I45850
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-513 <ETH>
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A;Cross-references: GB:L21717; NID:g393113; PIDN:AAA74597.1; PID:g393114
C;Genetics:
A;Gene: actRII
C;Superfamily: activin receptor II; protein kinase homology
C;Keywords: ATP; receptor
F;190-486/Domain: protein kinase homology <KIN>

Query Match 64.9%; Score 37; DB 2; Length 513;
Best Local Similarity 66.7%; Pred. No. 40;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

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Qy          2 WLIQLFHKK 10
              ||| ||::
Db        264 WLITAFHEK 272
```

Search completed: October 1, 2003, 09:07:33
Job time : 18 secs

GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: October 1, 2003, 09:05:03 ; Search time 11 Seconds
(without alignments)
42.752 Million cell updates/sec

Title: US-09-881-490-126
Perfect score: 57
Sequence: 1 KWLIQLFHKK 10

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 127863 seqs, 47026705 residues

Total number of hits satisfying chosen parameters: 127863

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : SwissProt_41:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	52	91.2	483	1	BPI_HUMAN	P17213 homo sapien
2	41	71.9	482	1	BPI_BOVIN	P17453 bos taurus
3	40	70.2	3224	1	RBP2_HUMAN	P49792 homo sapien
4	37	64.9	513	1	AVR2_BOVIN	Q28043 bos taurus
5	37	64.9	513	1	AVR2_HUMAN	P27037 homo sapien
6	37	64.9	513	1	AVR2_MOUSE	P27038 mus musculu
7	37	64.9	513	1	AVR2_RAT	P38444 rattus norv
8	37	64.9	513	1	AVR2_SHEEP	Q28560 ovis aries
9	37	64.9	514	1	AVR2_XENLA	P27039 xenopus lae
10	37	64.9	924	1	SEC5_HUMAN	Q96kp1 homo sapien
11	37	64.9	993	1	NISB_LACLA	P20103 lactococcus
12	36	63.2	365	1	VSGP_EBOIC	Q66811 ebola virus
13	36	63.2	473	1	CG21_ANTMA	P34800 antirrhinum
14	36	63.2	481	1	LBP_HUMAN	P18428 homo sapien
15	36	63.2	481	1	LBP_MOUSE	Q61805 mus musculu
16	36	63.2	481	1	LBP_RAT	Q63513 rattus norv
17	36	63.2	537	1	ACEA_EMENI	P28298 emericella
18	36	63.2	541	1	ACEA_YARLI	P41555 yarrowia li
19	36	63.2	676	1	VGP_EBOIC	Q66810 ebola virus
20	36	63.2	1579	1	SSK2_YEAST	P53559 saccharomyc
21	36	63.2	1693	1	POLN_HEVBG	P29324 hepatitis e
22	36	63.2	1693	1	POLN_HEVMY	Q04610 hepatitis e
23	36	63.2	1693	1	POLN_HEVPA	P33424 hepatitis e
24	36	63.2	3898	1	POLG_HCVA	P19712 hog cholera
25	36	63.2	3898	1	POLG_HCVB	P21530 hog cholera
26	35.5	62.3	505	1	SYE_CHLPN	Q9z7z3 chlamydia p
27	35	61.4	240	1	RCP2_PSEAE	O68638 pseudomonas
28	35	61.4	296	1	YDEH_ECOLI	P31129 escherichia
29	35	61.4	355	1	CKR1_HUMAN	P32246 homo sapien
30	35	61.4	355	1	CKR1_MACMU	P56482 macaca mula
31	35	61.4	382	1	AVRB_RAT	P38445 rattus norv
32	35	61.4	428	1	DCTA_ECO57	Q8x5m2 escherichia
33	35	61.4	428	1	DCTA_ECOLI	P37312 escherichia
34	35	61.4	469	1	C39A_HUMAN	Q9ny15 homo sapien
35	35	61.4	469	1	THRC_PSEAE	P29363 pseudomonas
36	35	61.4	511	1	AVRB_XENLA	P27041 xenopus lae
37	35	61.4	512	1	AVRB_BOVIN	Q95126 bos taurus
38	35	61.4	512	1	AVRB_HUMAN	Q13705 homo sapien
39	35	61.4	536	1	AVRB_MOUSE	P27040 mus musculu
40	35	61.4	567	1	TGR2_HUMAN	P37173 homo sapien
41	35	61.4	567	1	TGR2_RAT	P38438 rattus norv
42	35	61.4	592	1	TGR2_MOUSE	Q62312 mus musculu
43	35	61.4	613	1	ENP4_MOUSE	Q9dbt4 mus musculu
44	35	61.4	652	1	ULP2_SCHPO	O13769 schizosacch
45	35	61.4	880	1	YL86_YEAST	Q06708 saccharomyc

ALIGNMENTS

RESULT 1
BPI_HUMAN
ID BPI_HUMAN STANDARD; PRT; 483 AA.
AC P17213; Q9BYZ9; Q9H1L2; Q9H1M8; Q9H203; Q9UD65;
DT 01-AUG-1990 (Rel. 15, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Bactericidal permeability-increasing protein precursor (BPI) (CAP 57).
GN BPI.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A., AND SEQUENCE OF 28-64.
RX MEDLINE=89255455; PubMed=2722846;
RA Gray P.W., Flaggs G., Leong S.R., Gumina R.J., Weiss J., Ooi C.E.,
RA Elsbach P.;
RT "Cloning of the cDNA of a human neutrophil bactericidal protein.
RT Structural and functional correlations.";
RL J. Biol. Chem. 264:9505-9509(1989).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=94292492; PubMed=7517398;
RA Wilde C.G., Seilhamer J.J., McGrogan M., Ashton N., Snable J.L.,
RA Lane J.C., Leong S.R., Thornton M.B., Miller K.L., Scott R.W.;
RT "Bactericidal/permeability-increasing protein and lipopolysaccharide
RT (LPS)-binding protein. LPS binding properties and effects on LPS-
RT mediated cell activation.";
RL J. Biol. Chem. 269:17411-17416(1994).
RN [3]
RP SEQUENCE FROM N.A.
RA Xu J., Wang H.;
RT "Cloning of cDNA of human bactericidal/permeability-increasing
RT protein.";
RL Submitted (NOV-2000) to the EMBL/GenBank/DDBJ databases.
RN [4]
RP SEQUENCE FROM N.A.
RX MEDLINE=21638749; PubMed=11780052;
RA Deloukas P., Matthews L.H., Ashurst J., Burton J., Gilbert J.G.R.,
RA Jones M., Stavrides G., Almeida J.P., Babbage A.K., Bagguley C.L.,
RA Bailey J., Barlow K.F., Bates K.N., Beard L.M., Beare D.M.,
RA Beasley O.P., Bird C.P., Blakey S.E., Bridgeman A.M., Brown A.J.,
RA Buck D., Burrill W.D., Butler A.P., Carder C., Carter N.P.,
RA Chapman J.C., Clamp M., Clark G., Clark L.N., Clark S.Y., Clee C.M.,
RA Clegg S., Cobley V.E., Collier R.E., Connor R.E., Corby N.R.,
RA Coulson A., Coville G.J., Deadman R., Dhami P.D., Dunn M.,
RA Ellington A.G., Frankland J.A., Fraser A., French L., Garner P.,
RA Grafham D.V., Griffiths C., Griffiths M.N.D., Gwilliam R., Hall R.E.,
RA Hammond S., Harley J.L., Heath P.D., Ho S., Holden J.L., Howden P.J.,
RA Huckle E., Hunt A.R., Hunt S.E., Jekosch K., Johnson C.M., Johnson D.,
RA Kay M.P., Kimberley A.M., King A., Knights A., Laird G.K., Lawlor S.,
RA Lehvaeslaiho M.H., Leversha M.A., Lloyd C., Lloyd D.M., Lovell J.D.,
RA Marsh V.L., Martin S.L., McConnachie L.J., McLay K., McMurray A.A.,
RA Milne S.A., Mistry D., Moore M.J.F., Mullikin J.C., Nickerson T.,
RA Oliver K., Parker A., Patel R., Pearce T.A.V., Peck A.I.,

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RA   Phillimore B.J.C.T., Prathalingam S.R., Plumb R.W., Ramsay H.,
RA   Rice C.M., Ross M.T., Scott C.E., Sehra H.K., Shownkeen R., Sims S.,
RA   Skuce C.D., Smith M.L., Soderlund C., Steward C.A., Sulston J.E.,
RA   Swann R.M., Sycamore N., Taylor R., Tee L., Thomas D.W., Thorpe A.,
RA   Tracey A., Tromans A.C., Vaudin M., Wall M., Wallis J.M.,
RA   Whitehead S.L., Whittaker P., Willey D.L., Williams L., Williams S.A.,
RA   Wilming L., Wray P.W., Hubbard T., Durbin R.M., Bentley D.R., Beck S.,
RA   Rogers J.;
RT   "The DNA sequence and comparative analysis of human chromosome 20.";
RL   Nature 414:865-871(2001).
RN   [5]
RP   SEQUENCE OF 28-42.
RX   MEDLINE=88033057; PubMed=3667613;
RA   Ooi C.E., Weiss J., Elsbach P., Frangione B., Mannion B.;
RT   "A 25-kDa NH2-terminal fragment carries all the antibacterial
RT   activities of the human neutrophil 60-kDa
RT   bactericidal/permeability-increasing protein.";
RL   J. Biol. Chem. 262:14891-14894(1987).
RN   [6]
RP   SEQUENCE OF 28-47.
RX   MEDLINE=89315847; PubMed=2501794;
RA   Gabay J.E., Scott R.W., Campanelli D., Griffith J., Wilde C.,
RA   Marra M.N., Seeger M., Nathan C.F.;
RT   "Antibiotic proteins of human polymorphonuclear leukocytes.";
RL   Proc. Natl. Acad. Sci. U.S.A. 86:5610-5614(1989).
RN   [7]
RP   X-RAY CRYSTALLOGRAPHY (2.4 ANGSTROMS).
RX   MEDLINE=97334442; PubMed=9188532;
RA   Beamer L.J., Carroll S.F., Eisenberg D.;
RT   "Crystal structure of human BPI and two bound phospholipids at 2.4-A
RT   resolution.";
RL   Science 276:1861-1864(1997).
CC   -!- FUNCTION: THE CYTOTOXIC ACTION OF BPI IS LIMITED TO MANY SPECIES
CC       OF GRAM-NEGATIVE BACTERIA; THIS SPECIFICITY MAY BE EXPLAINED BY A
CC       STRONG AFFINITY OF THE VERY BASIC N-TERMINAL HALF FOR THE
CC       NEGATIVELY CHARGED LIPOPOLYSACCHARIDES THAT ARE UNIQUE TO THE
CC       GRAM-NEGATIVE BACTERIAL OUTER ENVELOPE.
CC   -!- SUBCELLULAR LOCATION: MEMBRANE-ASSOCIATED IN POLYMORPHONUCLEAR
CC       LEUKOCYTES (PMN) GRANULES.
CC   -!- TISSUE SPECIFICITY: RESTRICTED TO CELLS OF THE MYELOID SERIES.
CC   -!- DOMAIN: THE N-TERMINAL REGION MAY BE EXPOSED TO THE INTERIOR OF
CC       THE GRANULE, WHEREAS THE C-TERMINAL PORTION MAY BE EMBEDDED IN THE
CC       MEMBRANE. DURING PHAGOCYTOSIS AND DEGRANULATION, PROTEASES MAY BE
CC       RELEASED AND ACTIVATED AND CLEAVE BPI AT THE JUNCTION OF THE N
CC       AND C-TERMINAL PORTIONS OF THE MOLECULE, PROVIDING CONTROLLED
CC       RELEASE OF THE N-TERMINAL ANTIBACTERIAL FRAGMENT WHEN BACTERIA ARE
CC       INGESTED.
CC   -!- SIMILARITY: BELONGS TO THE BPI/CETP/LBP/PLTP FAMILY.
CC   ---------------------------------------------------------------------
CC   This SWISS-PROT entry is copyright. It is produced through a collaboration
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CC   or send an email to license@isb-sib.ch).
CC   ---------------------------------------------------------------------
DR   EMBL; J04739; AAA51841.1; ALT_INIT.
DR   EMBL; AF322588; AAG42844.1; -.
DR   EMBL; AL359555; CAC13043.1; -.
DR   EMBL; AL499625; CAC27350.1; -.
DR   EMBL; AL391692; CAC10453.1; -.
DR   PDB; 1BP1; 04-SEP-97.
DR   PDB; 1EWF; 21-JUN-00.
DR   Genew; HGNC:1095; BPI.
DR   MIM; 109195; -.
DR   GO; GO:0005887; C:integral to plasma membrane; TAS.
DR   InterPro; IPR001124; LBP_BPI_CETP.
DR   Pfam; PF01273; LBP_BPI_CETP; 1.
DR   Pfam; PF02886; LBP_BPI_CETP_C; 1.
DR   SMART; SM00328; BPI1; 1.
DR   SMART; SM00329; BPI2; 1.
DR   PROSITE; PS00400; LBP_BPI_CETP; 1.
KW   Antibiotic; Signal; Transmembrane; Glycoprotein; 3D-structure.
FT   SIGNAL       1    27
FT   CHAIN       28   483       BACTERICIDAL PERMEABILITY-INCREASING
FT                              PROTEIN.
FT   SITE        236   241       CLEAVAGE SITES FOR ELASTASE (POTENTIAL).
FT   TRANSMEM    365   385       POTENTIAL.
FT   CONFLICT     12    12       V -> A (IN REF. 3 AND 4).
FT   CONFLICT    212   212       K -> E (IN REF. 4).
FT   CONFLICT    351   351       P -> S (IN REF. 3).
FT   CONFLICT    371   371       F -> L (IN REF. 2).
FT   CONFLICT    400   400       N -> D (IN REF. 3).
FT   CONFLICT    407   407       K -> R (IN REF. 3).
FT   STRAND       32    37
FT   HELIX        38    56
FT   TURN         57    58
FT   STRAND       64    70
FT   TURN         71    73
FT   STRAND       74    89
FT   STRAND       93    98
FT   TURN         99   101
FT   STRAND      102   122
FT   TURN        123   124
FT   STRAND      125   149
FT   TURN        150   153
FT   STRAND      154   163
FT   STRAND      168   172
FT   TURN        174   175
FT   HELIX       179   188
FT   TURN        189   189
FT   HELIX       190   217
FT   TURN        218   218
FT   STRAND      223   225
FT   STRAND      230   233
FT   STRAND      236   236
FT   STRAND      241   242
FT   STRAND      246   251
FT   STRAND      254   257
FT   STRAND      281   286
FT   HELIX       287   299
FT   TURN        300   301
FT   STRAND      304   307
FT   HELIX       309   311
FT   STRAND      321   321
FT   HELIX       322   325
FT   TURN        326   328
FT   TURN        330   331
FT   HELIX       332   335
FT   STRAND      340   347
FT   STRAND      352   356
FT   TURN        357   358
FT   STRAND      359   363
FT   STRAND      365   373
FT   TURN        375   376
FT   STRAND      379   388
FT   STRAND      391   398
FT   TURN        399   400
FT   STRAND      401   408
FT   STRAND      412   412
FT   STRAND      415   418
FT   TURN        419   420
FT   HELIX       425   428
FT   HELIX       429   450
FT   STRAND      452   453
FT   TURN        458   459
FT   STRAND      460   470
FT   TURN        471   472
FT   STRAND      473   483
SQ   SEQUENCE   483 AA;  53396 MW;  AD58C92BCAD8F47C CRC64;

  Query Match             91.2%;  Score 52;  DB 1;  Length 483;
  Best Local Similarity   100.0%;  Pred. No. 0.021;
  Matches    9;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
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Qy          2 WLIQLFHKK 10
              |||||||||
Db        180 WLIQLFHKK 188


RESULT 2
BPI_BOVIN
ID   BPI_BOVIN      STANDARD;      PRT:   482 AA.
AC   P17213;
DT   01-AUG-1990 (Rel. 15, Created)
DT   01-AUG-1990 (Rel. 15, Last sequence update)
DT   15-JUL-1998 (Rel. 36, Last annotation update)
DE   Bactericidal permeability-increasing protein precursor (BPI).
GN   BPI.
OS   Bos taurus (Bovine).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
OC   Bovidae; Bovinae; Bos.
OX   NCBI_TaxID=9913;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Bone marrow;
RX   MEDLINE=90272418; PubMed=2349103;
RA   Leong S.R., Camerato T.;
RT   "Nucleotide sequence of the bovine bactericidal permeability
RT   increasing protein (BPI).";
RL   Nucleic Acids Res. 18:3052-3052(1990).
CC   -!- FUNCTION: THE CYTOTOXIC ACTION OF BPI IS LIMITED TO MANY SPECIES
CC       OF GRAM-NEGATIVE BACTERIA; THIS SPECIFICITY MAY BE EXPLAINED BY A
CC       STRONG AFFINITY OF THE VERY BASIC N-TERMINAL HALF FOR THE
CC       NEGATIVELY CHARGED LIPOPOLYSACCHARIDES THAT ARE UNIQUE TO THE
CC       GRAM-NEGATIVE BACTERIAL OUTER ENVELOPE.
CC   -!- SUBCELLULAR LOCATION: MEMBRANE-ASSOCIATED IN POLYMORPHONUCLEAR
CC       LEUKOCYTES (PMN) GRANULES (BY SIMILARITY).
CC   -!- TISSUE SPECIFICITY: RESTRICTED TO CELLS OF THE MYELOID SERIES (BY
CC       SIMILARITY).
CC   -!- DOMAIN: THE N-TERMINAL REGION MAY BE EXPOSED TO THE INTERIOR OF
CC       THE GRANULE, WHEREAS THE C-TERMINAL PORTION MAY BE EMBEDDED IN THE
CC       MEMBRANE. DURING PHAGOCYTOSIS AND DEGRANULATION, PROTEASES MAY BE
CC       RELEASED AND ACTIVATED AND CLEAVE BPI AT THE JUNCTION OF THE N-
CC       AND C-TERMINAL PORTIONS OF THE MOLECULE, PROVIDING CONTROLLED
CC       RELEASE OF THE N-TERMINAL ANTIBACTERIAL FRAGMENT WHEN BACTERIA ARE
CC       INGESTED (BY SIMILARITY).
CC   -!- SIMILARITY: BELONGS TO THE BPI/CETP/LBP/PLTP FAMILY.
CC   ---------------------------------------------------------------------
CC   This SWISS-PROT entry is copyright. It is produced through a collaboration
CC   between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC   the European Bioinformatics Institute. There are no restrictions on its
CC   use by non-profit institutions as long as its content is in no way
CC   modified and this statement is not removed. Usage by and for commercial
CC   entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC   or send an email to license@isb-sib.ch).
CC   ---------------------------------------------------------------------
DR   EMBL; X52563; CAA36797.1; -.
DR   PIR; S10180; S10180.
DR   HSSP; P17213; 1BP1.
DR   InterPro; IPR001124; LBP_BPI_CETP.
DR   Pfam; PF01273; LBP_BPI_CETP; 1.
DR   Pfam; PF02886; LBP_BPI_CETP_C; 1.
DR   SMART; SM00328; BPI1; 1.
DR   SMART; SM00329; BPI2; 1.
DR   PROSITE; PS00400; LBP_BPI_CETP; 1.
KW   Antibiotic; Signal; Membrane; Glycoprotein.
FT   SIGNAL        1     26
FT   CHAIN        27    482       BACTERICIDAL PERMEABILITY-INCREASING
FT                                 PROTEIN.
FT   SITE         235    240       CLEAVAGE SITES FOR ELASTASE (POTENTIAL).
FT   CARBOHYD      62     62       N-LINKED (GLCNAC. . .) (POTENTIAL).
FT   CARBOHYD     303    303       N-LINKED (GLCNAC. . .) (POTENTIAL).
FT   CARBOHYD     375    375       N-LINKED (GLCNAC. . .) (POTENTIAL).
FT   CARBOHYD     389    389       N-LINKED (GLCNAC. . .) (POTENTIAL).
FT   CARBOHYD     463    463       N-LINKED (GLCNAC. . .) (POTENTIAL).
SQ   SEQUENCE   482 AA;  53432 MW;  DD7D59AE785BC42D CRC64;

  Query Match          71.9%;  Score 41;  DB 1;  Length 482;
  Best Local Similarity   77.8%;  Pred. No. 2.5;
  Matches    7;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          2 WLIQLFHKK 10
              ||||| |:
Db        179 WLIQLFRKR 187


RESULT 3
RBP2_HUMAN
ID   RBP2_HUMAN     STANDARD;      PRT;  3224 AA.
AC   P49792; Q15280;
DT   01-OCT-1996 (Rel. 34, Created)
DT   01-OCT-1996 (Rel. 34, Last sequence update)
DT   28-FEB-2003 (Rel. 41, Last annotation update)
DE   Ran-binding protein 2 (RanBP2) (Nuclear pore complex protein Nup358)
DE   (Nucleoporin Nup358) (358 kDa nucleoporin) (P270).
GN   RANBP2 OR NUP358.
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=95294031; PubMed=7775481;
RA   Wu J., Matunis M.J., Kraemer D., Blobel G., Coutavas E.;
RT   "Nup358, a cytoplasmically exposed nucleoporin with peptide repeats,
RT   Ran-GTP binding sites, zinc fingers, a cyclophilin A homologous
RT   domain, and a leucine-rich region.";
RL   J. Biol. Chem. 270:14209-14213(1995).
RN   [2]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Blood;
RX   MEDLINE=95327194; PubMed=7603572;
RA   Yokoyama N., Hayashi N., Seki T., Nishii K., Hayashida T.,
RA   Kuma K.I., Miyata T., Fukui M., Nishimoto T., Pante N., Aebi U.;
RT   "A giant nucleopore protein that binds Ran/TC4.";
RL   Nature 376:184-188(1995).
RN   [3]
RP   X-RAY CRYSTALLOGRAPHY (2.96 ANGSTROMS) OF 1171-1304.
RX   MEDLINE=99176415; PubMed=10078529;
RA   Vetter I.R., Nowak C., Nishimoto T., Kuhlmann J., Wittinghofer A.;
RT   "Structure of a Ran-binding domain complexed with Ran bound to a GTP
RT   analogue: implications for nuclear transport.";
RL   Nature 398:39-46(1999).
CC   -!- FUNCTION: INVOLVED IN TRANSPORT FACTOR (RAN-GTP, KARYOPHERIN)-
CC       MEDIATED PROTEIN IMPORT VIA THE F-G REPEAT-CONTAINING DOMAIN WHICH
CC       ACTS AS A DOCKING SITE FOR SUBSTRATES. COULD ALSO HAVE ISOMERASE
CC       OR CHAPERONE ACTIVITY AND MAY BIND RNA OR DNA. COMPONENT OF THE
CC       NUCLEAR EXPORT PATHWAY. SPECIFIC DOCKING SITE FOR THE NUCLEAR
CC       EXPORT FACTOR EXPORTIN-1.
CC   -!- SUBUNIT: FORMS A TIGHT COMPLEX IN ASSOCIATION WITH RANBP1 AND THE
CC       UBIQUITIN-CONJUGATING ENZYME E2 (UBC9) (BY SIMILARITY).
CC   -!- SUBCELLULAR LOCATION: NUCLEAR PORE COMPLEX. CYTOPLASMIC FILAMENTS.
CC   -!- DOMAIN: CONTAINS F-X-F-G REPEATS.
CC   -!- SIMILARITY: Contains 4 RanBD1 domains.
CC   -!- SIMILARITY: Contains 8 RANBP2-type zinc fingers.
CC   -!- SIMILARITY: Contains 1 cyclophilin-like PPIase domain.
CC   ---------------------------------------------------------------------
CC   This SWISS-PROT entry is copyright. It is produced through a collaboration
CC   between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC   the European Bioinformatics Institute. There are no restrictions on its
CC   use by non-profit institutions as long as its content is in no way
CC   modified and this statement is not removed. Usage by and for commercial
CC   entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC   or send an email to license@isb-sib.ch).
CC   ---------------------------------------------------------------------
DR   EMBL; L41840; AAC41758.1; -.
DR   EMBL; D42063; BAA07662.1; -.
DR   PIR; S58884; S58884.
DR   PDB; 1RRP; 18-MAY-99.
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DR   Genew; HGNC:9848; RANBP2.
DR   MIM; 601181; -.
DR   GO; GO:0005643; C:nuclear pore; TAS.
DR   GO; GO:0008536; F:RAN protein binding activity; TAS.
DR   GO; GO:0006606; P:protein-nucleus import; TAS.
DR   InterPro; IPR002130; CSA_PPIase.
DR   InterPro; IPR000697; EVH1.
DR   InterPro; IPR000156; Ran_BP1.
DR   InterPro; IPR001440; TPR.
DR   InterPro; IPR001876; Znf_RanGDP.
DR   Pfam; PF00160; pro_isomerase; 1.
DR   Pfam; PF00638; Ran_BP1; 4.
DR   Pfam; PF00515; TPR; 1.
DR   Pfam; PF00641; zf-RanBP; 8.
DR   PRINTS; PR00153; CSAPPISMRASE.
DR   SMART; SM00160; RanBD; 4.
DR   SMART; SM00547; ZnF_RBZ; 8.
DR   PROSITE; PS00170; CSA_PPIASE_1; 1.
DR   PROSITE; PS50072; CSA_PPIASE_2; 1.
DR   PROSITE; PS50196; RANBD1; 4.
DR   PROSITE; PS01358; ZF_RANBP2_1; 8.
DR   PROSITE; PS50199; ZF_RANBP2_2; 8.
KW   Nuclear protein; Transport; Repeat; Zinc-finger; Isomerase; Rotamase;
KW   3D-structure; Polymorphism.
FT   DOMAIN      1171   1307       RANBD1 1.
FT   ZN_FING     1351   1381       RANBP2-TYPE 1.
FT   ZN_FING     1415   1444       RANBP2-TYPE 2.
FT   ZN_FING     1479   1508       RANBP2-TYPE 3.
FT   ZN_FING     1543   1572       RANBP2-TYPE 4.
FT   ZN_FING     1606   1635       RANBP2-TYPE 5.
FT   ZN_FING     1665   1694       RANBP2-TYPE 6.
FT   ZN_FING     1724   1753       RANBP2-TYPE 7.
FT   ZN_FING     1781   1810       RANBP2-TYPE 8.
FT   DOMAIN      2012   2148       RANBD1 2.
FT   DOMAIN      2309   2445       RANBD1 3.
FT   DOMAIN      2911   3046       RANBD1 4.
FT   DOMAIN      3067   3223       PPIASE, CYCLOPHILIN-TYPE.
FT   VARIANT     1892   1892       P -> A (IN dbSNP:12770).
FT                                 /FTId=VAR_014886.
FT   CONFLICT     777    777       R -> H (IN REF. 2).
FT   CONFLICT     784    784       R -> K (IN REF. 2).
FT   STRAND      1191   1204
FT   STRAND      1211   1224
FT   STRAND      1231   1235
FT   TURN        1237   1239
FT   STRAND      1242   1244
FT   STRAND      1247   1247
FT   STRAND      1255   1255
FT   TURN        1258   1259
FT   TURN        1261   1262
FT   STRAND      1263   1270
FT   TURN        1272   1273
FT   STRAND      1277   1284
FT   HELIX       1288   1300
FT   TURN        1301   1302
SQ   SEQUENCE   3224 AA;  358214 MW;  54E78412C96A3C63 CRC64;

  Query Match             70.2%;  Score 40;  DB 1;  Length 3224;
  Best Local Similarity   87.5%;  Pred. No. 25;
  Matches    7;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFH 8
              ||| |||| 
Db        455 KWLKQLFH 462


RESULT 4
AVR2_BOVIN
ID   AVR2_BOVIN     STANDARD;      PRT;   513 AA.
AC   Q28043;
DT   01-NOV-1997 (Rel. 35, Created)
DT   01-NOV-1997 (Rel. 35, Last sequence update)
DT   28-FEB-2003 (Rel. 41, Last annotation update)
DE   Activin receptor type II precursor (EC 2.7.1.37) (ACTR-II).
GN   ACVR2 OR ACTRII.
OS   Bos taurus (Bovine).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
OC   Bovidae; Bovinae; Bos.
OX   NCBI_TaxID=9913;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   STRAIN=Holstein; TISSUE=Testis;
RX   MEDLINE=95203477; PubMed=7534730;
RA   Ethier J.F., Houde A., Lussier J.G., Silversides D.W.;
RT   "Bovine activin receptor type II cDNA: cloning and tissue
RT   expression.";
RL   Mol. Cell. Endocrinol. 106:1-8(1994).
RN   [2]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Ovary;
RX   MEDLINE=97032546; PubMed=8875905;
RA   Monteagudo L.V., Heriz A., Flavin N., Rogers M., Ennis S.,
RA   Arruga M.V.;
RT   "Fluorescent in situ localization of the bovine activin receptor type
RT   IIA locus on chromosome 2 (2q2.3-2.4).";
RL   Mamm. Genome 7:869-869(1996).
CC   -!- FUNCTION: RECEPTOR FOR ACTIVIN A, ACTIVIN B, AND INHIBIN A.
CC       INVOLVED IN TRANSMEMBRANE SIGNALING.
CC   -!- CATALYTIC ACTIVITY: ATP + a protein = ADP + a phosphoprotein.
CC   -!- SUBCELLULAR LOCATION: Type I membrane protein.
CC   -!- SIMILARITY: BELONGS TO THE SER/THR FAMILY OF PROTEIN KINASES.
CC       TGFB RECEPTOR SUBFAMILY.
CC   ---------------------------------------------------------------------
CC   This SWISS-PROT entry is copyright. It is produced through a collaboration
CC   between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC   the European Bioinformatics Institute. There are no restrictions on its
CC   use by non-profit institutions as long as its content is in no way
CC   modified and this statement is not removed. Usage by and for commercial
CC   entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC   or send an email to license@isb-sib.ch).
CC   ---------------------------------------------------------------------
DR   EMBL; L21717; AAA74597.1; -.
DR   EMBL; U43208; AAC48694.1; -.
DR   PIR; I45850; I45850.
DR   HSSP; P27038; 1BTE.
DR   InterPro; IPR000472; Activin_rec.
DR   InterPro; IPR000333; Actn_receptorII.
DR   InterPro; IPR000719; Prot_kinase.
DR   InterPro; IPR002290; Ser_thr_pkinase.
DR   Pfam; PF01064; Activin_recp; 1.
DR   Pfam; PF00069; pkinase; 1.
DR   PRINTS; PR00653; ACTIVIN2R.
DR   ProDom; PD000001; Prot_kinase; 1.
DR   PROSITE; PS00107; PROTEIN_KINASE_ATP; FALSE_NEG.
DR   PROSITE; PS00108; PROTEIN_KINASE_ST; 1.
DR   PROSITE; PS50011; PROTEIN_KINASE_DOM; 1.
KW   Receptor; Transferase; Serine/threonine-protein kinase; ATP-binding;
KW   Transmembrane; Glycoprotein; Signal.
FT   SIGNAL         1     19       POTENTIAL.
FT   CHAIN         20    513       ACTIVIN RECEPTOR TYPE II.
FT   DOMAIN        20    135       EXTRACELLULAR (POTENTIAL).
FT   TRANSMEM     136    161       POTENTIAL.
FT   DOMAIN       162    513       CYTOPLASMIC (POTENTIAL).
FT   DOMAIN       192    485       PROTEIN KINASE.
FT   NP_BIND      198    206       ATP (BY SIMILARITY).
FT   BINDING      219    219       ATP (BY SIMILARITY).
FT   ACT_SITE     322    322       BY SIMILARITY.
FT   DISULFID      30     60       BY SIMILARITY.
FT   DISULFID      50     78       BY SIMILARITY.
FT   DISULFID      85    104       BY SIMILARITY.
FT   DISULFID      91    103       BY SIMILARITY.
FT   DISULFID     105    110       BY SIMILARITY.
FT   CARBOHYD      43     43       N-LINKED (GLCNAC. . .) (POTENTIAL).
FT   CARBOHYD      66     66       N-LINKED (GLCNAC. . .) (POTENTIAL).
SQ   SEQUENCE   513 AA;  57951 MW;  C2969A54CF00617B CRC64;
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  Query Match             64.9%;  Score 37;  DB 1;  Length 513;
  Best Local Similarity   66.7%;  Pred. No. 16;
  Matches    6;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          2 WLIQLFHKK 10
              |||  |||:|
Db        264 WLITAFHEK 272


RESULT 5
AVR2_HUMAN
ID   AVR2_HUMAN     STANDARD;      PRT:   513 AA.
AC   P27037; Q92474;
DT   01-AUG-1992 (Rel. 23, Created)
DT   01-AUG-1992 (Rel. 23, Last sequence update)
DT   28-FEB-2003 (Rel. 41, Last annotation update)
DE   Activin receptor type II precursor (EC 2.7.1.37) (ACTR II) (ACTRIIA).
GN   ACVR2.
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Testis;
RX   MEDLINE=92182002; PubMed=1311955;
RA   Matzuk M.M., Bradley A.;
RT   "Cloning of the human activin receptor cDNA reveals high evolutionary
RT   conservation.";
RL   Biochim. Biophys. Acta 1130:105-108(1992).
RN   [2]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Testis;
RX   MEDLINE=92231944; PubMed=1314589;
RA   Donaldson C.J., Mathews L.S., Vale W.W.;
RT   "Molecular cloning and binding properties of the human type II
RT   activin receptor.";
RL   Biochem. Biophys. Res. Commun. 184:310-316(1992).
RN   [3]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Mammary gland;
RA   Geiser A.S.;
RL   Submitted (DEC-1991) to the EMBL/GenBank/DDBJ databases.
RN   [4]
RP   SEQUENCE FROM N.A.
RA   Iimura T., Oida S.;
RL   Submitted (NOV-1994) to the EMBL/GenBank/DDBJ databases.
CC   -!- FUNCTION: RECEPTOR FOR ACTIVIN A, ACTIVIN B, AND INHIBIN A.
CC       INVOLVED IN TRANSMEMBRANE SIGNALING.
CC   -!- CATALYTIC ACTIVITY: ATP + a protein = ADP + a phosphoprotein.
CC   -!- SUBCELLULAR LOCATION: Type I membrane protein.
CC   -!- SIMILARITY: BELONGS TO THE SER/THR FAMILY OF PROTEIN KINASES.
CC       TGFB RECEPTOR SUBFAMILY.
CC   ---------------------------------------------------------------------- ---
CC   This SWISS-PROT entry is copyright. It is produced through a collaboration
CC   between the Swiss Institute of Bioinformatics and the EMBL outstation
CC   the European Bioinformatics Institute. There are no restrictions on its
CC   use by non-profit institutions as long as its content is in no way
CC   modified and this statement is not removed. Usage by and for commercial
CC   entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC   or send an email to license@isb-sib.ch).
CC   ----------------------------------------------------------------------
DR   EMBL; X63128; CAA44839.1; -.
DR   EMBL; X62381; CAA44245.1; -.
DR   EMBL; M93415; AAA35504.1; -.
DR   EMBL; D31770; BAA06548.1; -.
DR   PIR; JQ1486; JQ1486.
DR   HSSP; P27038; 1BTE.
DR   Genew; HGNC:173; ACVR2.
DR   MIM; 102581; -.
DR   GO; GO:0005887; C:integral to plasma membrane; TAS.
DR   GO; GO:0007178; P:transmembrane receptor protein serine/threo. . .; TAS.
DR   InterPro; IPR000472; Activin_rec.
DR   InterPro; IPR000333; Actn_receptorII.
DR   InterPro; IPR000719; Prot_kinase.
DR   InterPro; IPR002290; Ser_thr_pkinase.
DR   Pfam; PF01064; Activin_recp; 1.
DR   Pfam; PF00069; pkinase; 1.
DR   PRINTS; PR00653; ACTIVINR2R.
DR   ProDom; PD000001; Prot_kinase; 1.
DR   PROSITE; PS00107; PROTEIN_KINASE_ATP; FALSE_NEG.
DR   PROSITE; PS00108; PROTEIN_KINASE_ST; 1.
DR   PROSITE; PS50011; PROTEIN_KINASE_DOM; 1.
KW   Receptor; Transferase; Serine/threonine-protein kinase; ATP-binding;
KW   Transmembrane; Glycoprotein; Signal.
FT   SIGNAL        1     19       POTENTIAL.
FT   CHAIN        20    513       ACTIVIN RECEPTOR TYPE II.
FT   DOMAIN       20    135       EXTRACELLULAR (POTENTIAL).
FT   TRANSMEM    136    161       POTENTIAL.
FT   DOMAIN      162    513       CYTOPLASMIC (POTENTIAL).
FT   DOMAIN      192    485       PROTEIN KINASE.
FT   NP_BIND     198    206       ATP (BY SIMILARITY).
FT   BINDING     219    219       ATP (BY SIMILARITY).
FT   ACT_SITE    322    322       BY SIMILARITY.
FT   DISULFID     30     60       BY SIMILARITY.
FT   DISULFID     50     78       BY SIMILARITY.
FT   DISULFID     85    104       BY SIMILARITY.
FT   DISULFID     91    103       BY SIMILARITY.
FT   DISULFID    105    110       BY SIMILARITY.
FT   CARBOHYD     43     43       N-LINKED (GLCNAC. . .) (POTENTIAL).
FT   CARBOHYD     66     66       N-LINKED (GLCNAC. . .) (POTENTIAL).
FT   CONFLICT     13     13       L -> V (IN REF. 4).
FT   CONFLICT    204    206       GCV -> PSL (IN REF. 4).
FT   CONFLICT    348    348       E -> V (IN REF. 4).
SQ   SEQUENCE   513 AA;  57847 MW;  A89822E880979618 CRC64;

  Query Match             64.9%;  Score 37;  DB 1;  Length 513;
  Best Local Similarity   66.7%;  Pred. No. 16;
  Matches    6;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          2 WLIQLFHKK 10
              |||  |||:|
Db        264 WLITAFHEK 272


RESULT 6
AVR2_MOUSE
ID   AVR2_MOUSE     STANDARD;      PRT:   513 AA.
AC   P27038;
DT   01-AUG-1992 (Rel. 23, Created)
DT   01-AUG-1992 (Rel. 23, Last sequence update)
DT   28-FEB-2003 (Rel. 41, Last annotation update)
DE   Activin receptor type II precursor (EC 2.7.1.37) (ACTR-II).
GN   ACVR2 OR ACVR2A.
OS   Mus musculus (Mouse).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX   NCBI_TaxID=10090;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=91256317; PubMed=1646080;
RA   Mathews L.S., Vale W.W.;
RT   "Expression cloning of an activin receptor, a predicted transmembrane
RT   serine kinase.";
RL   Cell 65:973-982(1991).
RN   [2]
RP   X-RAY CRYSTALLOGRAPHY (1.5 ANGSTROMS) OF 25-121.
RX   MEDLINE=99101377; PubMed=9886286;
RA   Greenwald J., Fischer W.H., Vale W.W., Choe S.;
RT   "Three-finger toxin fold for the extracellular ligand-binding domain
RT   of the type II activin receptor serine kinase.";
RL   Nat. Struct. Biol. 6:18-22(1999).
RN   [3]
RP   DISULFIDE BONDS OF EXTRACELLULAR DOMAIN.
RX   MEDLINE=99376271; PubMed=10449041;
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RA   Fischer W.H., Greenwald J., Park M., Craig A.G., Choe S., Vale W.;
RT   "The disulfide bond arrangement in the extracellular domain of the
RT   activin type II receptor.";
RL   J. Protein Chem. 18:437-446(1999).
CC   -!- FUNCTION: RECEPTOR FOR ACTIVIN A, ACTIVIN B, AND INHIBIN A.
CC       INVOLVED IN TRANSMEMBRANE SIGNALING.
CC   -!- CATALYTIC ACTIVITY: ATP + a protein = ADP + a phosphoprotein.
CC   -!- SUBCELLULAR LOCATION: Type I membrane protein.
CC   -!- TISSUE SPECIFICITY: BRAIN, TESTIS, INTESTINE, LIVER, AND KIDNEY.
CC   -!- SIMILARITY: BELONGS TO THE SER/THR FAMILY OF PROTEIN KINASES.
CC       TGFB RECEPTOR SUBFAMILY.
CC   ---------------------------------------------------------------------
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CC   entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC   or send an email to license@isb-sib.ch).
CC   ---------------------------------------------------------------------
DR   EMBL; M65287; AAA37171.1; -.
DR   PIR; A39896; A39896.
DR   PDB; 1BTE; 09-FEB-99.
DR   MGD; MGI:102806; Acvr2.
DR   InterPro; IPR000472; Activin_rec.
DR   InterPro; IPR000333; Actn_receptorII.
DR   InterPro; IPR000719; Prot_kinase.
DR   InterPro; IPR002290; Ser_thr_pkinase.
DR   Pfam; PF01064; Activin_recp; 1.
DR   Pfam; PF00069; pkinase; 1.
DR   PRINTS; PR00653; ACTIVIN2R.
DR   ProDom; PD000001; Prot_kinase; 1.
DR   PROSITE; PS00107; PROTEIN_KINASE_ATP; FALSE_NEG.
DR   PROSITE; PS00108; PROTEIN_KINASE_ST; 1.
DR   PROSITE; PS50011; PROTEIN_KINASE_DOM; 1.
KW   Receptor; Transferase; Serine/threonine-protein kinase; ATP-binding;
KW   Transmembrane; Glycoprotein; Signal; 3D-structure.
FT   SIGNAL        1     19       POTENTIAL.
FT   CHAIN        20    513       ACTIVIN RECEPTOR TYPE II.
FT   DOMAIN       20    135       EXTRACELLULAR (POTENTIAL).
FT   TRANSMEM    136    161       POTENTIAL.
FT   DOMAIN      162    513       CYTOPLASMIC (POTENTIAL).
FT   DOMAIN      192    485       PROTEIN KINASE.
FT   NP_BIND     198    206       ATP (BY SIMILARITY).
FT   BINDING     219    219       ATP (BY SIMILARITY).
FT   ACT_SITE    322    322       BY SIMILARITY.
FT   DISULFID     30     60
FT   DISULFID     50     78
FT   DISULFID     85    104
FT   DISULFID     91    103
FT   DISULFID    105    110
FT   CARBOHYD     43     43       N-LINKED (GLCNAC. . .) (POTENTIAL).
FT   CARBOHYD     66     66       N-LINKED (GLCNAC. . .) (POTENTIAL).
FT   STRAND       29     34
FT   TURN         35     36
FT   HELIX        37     40
FT   TURN         41     41
FT   STRAND       45     49
FT   STRAND       59     67
FT   TURN         68     69
FT   STRAND       70     79
FT   STRAND       91     93
FT   STRAND      101    105
FT   TURN        108    109
FT   HELIX       110    112
FT   STRAND      114    116
SQ   SEQUENCE   513 AA;  57889 MW;  475CD292506BAC61 CRC64;

  Query Match             64.9%;  Score 37;  DB 1;  Length 513;
  Best Local Similarity   66.7%;  Pred. No. 16;
  Matches    6;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          2 WLIQLFHKK 10
                 |.|  ||:|
Db        264 WLITAFHEK 272


RESULT 7
AVR2_RAT
ID   AVR2_RAT       STANDARD;      PRT:   513 AA.
AC   P38444;
DT   01-OCT-1994 (Rel. 30, Created)
DT   01-OCT-1994 (Rel. 30, Last sequence update)
DT   28-FEB-2003 (Rel. 41, Last annotation update)
DE   Activin receptor type II precursor (EC 2.7.1.37) (ACTR-II).
GN   ACVR2 OR ACTRII.
OS   Rattus norvegicus (Rat).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX   NCBI_TaxID=10116;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   STRAIN=Sprague-Dawley; TISSUE=Testis;
RX   MEDLINE=93279247; PubMed=7916681;
RA   Feng Z.M., Madigan M.B., Chen C.L.C.;
RT   "Expression of type II activin receptor genes in the male and female
RT   reproductive tissues of the rat.";
RL   Endocrinology 132:2593-2600(1993).
RN   [2]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Ovary;
RX   MEDLINE=93050162; PubMed=1385212;
RA   Shinozaki H., Ito I., Hasegawa Y., Nakamura K., Igarashi S.,
RA   Nakamura M., Miyamoto K., Eto Y., Ibuki Y., Minegishi T.;
RT   "Cloning and sequencing of a rat type II activin receptor.";
RL   FEBS Lett. 312:53-56(1992).
CC   -!- FUNCTION: RECEPTOR FOR ACTIVIN A, ACTIVIN B, AND INHIBIN A.
CC       INVOLVED IN TRANSMEMBRANE SIGNALING.
CC   -!- CATALYTIC ACTIVITY: ATP + a protein = ADP + a phosphoprotein.
CC   -!- SUBCELLULAR LOCATION: Type I membrane protein.
CC   -!- SIMILARITY: BELONGS TO THE SER/THR FAMILY OF PROTEIN KINASES.
CC       TGFB RECEPTOR SUBFAMILY.
CC   ---------------------------------------------------------------------
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CC   ---------------------------------------------------------------------
DR   EMBL; L10639; AAA40674.1; -.
DR   EMBL; S48190; AAB23958.1; -.
DR   PIR; S27258; S27258.
DR   HSSP; P27038; 1BTE.
DR   InterPro; IPR000472; Activin_rec.
DR   InterPro; IPR000333; Actn_receptorII.
DR   InterPro; IPR000719; Prot_kinase.
DR   InterPro; IPR002290; Ser_thr_pkinase.
DR   Pfam; PF01064; Activin_recp; 1.
DR   Pfam; PF00069; pkinase; 1.
DR   PRINTS; PR00653; ACTIVIN2R.
DR   ProDom; PD000001; Prot_kinase; 1.
DR   PROSITE; PS00107; PROTEIN_KINASE_ATP; FALSE_NEG.
DR   PROSITE; PS00108; PROTEIN_KINASE_ST; 1.
DR   PROSITE; PS50011; PROTEIN_KINASE_DOM; 1.
KW   Receptor; Transferase; Serine/threonine-protein kinase; ATP-binding;
KW   Transmembrane; Glycoprotein; Signal.
FT   SIGNAL        1     19       POTENTIAL.
FT   CHAIN        20    513       ACTIVIN RECEPTOR TYPE II.
FT   DOMAIN       20    135       EXTRACELLULAR (POTENTIAL).
FT   TRANSMEM    136    161       POTENTIAL.
FT   DOMAIN      162    513       CYTOPLASMIC (POTENTIAL).
FT   DOMAIN      192    485       PROTEIN KINASE.
FT   NP_BIND     198    206       ATP (BY SIMILARITY).
FT   BINDING     219    219       ATP (BY SIMILARITY).
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FT   ACT_SITE    322    322       BY SIMILARITY.
FT   DISULFID     30     60       BY SIMILARITY.
FT   DISULFID     50     78       BY SIMILARITY.
FT   DISULFID     85    104       BY SIMILARITY.
FT   DISULFID     91    103       BY SIMILARITY.
FT   DISULFID    105    110       BY SIMILARITY.
FT   CARBOHYD     43     43       N-LINKED (GLCNAC. . .) (POTENTIAL).
FT   CARBOHYD     66     66       N-LINKED (GLCNAC. . .) (POTENTIAL).
FT   CONFLICT    165    165       M -> K (IN REF. 2).
FT   CONFLICT    218    218       V -> I (IN REF. 2).
FT   CONFLICT    353    353       G -> A (IN REF. 2).
FT   CONFLICT    475    475       L -> V (IN REF. 2).
SQ   SEQUENCE   513 AA;  57892 MW;  CE3A8742EF91DD7D CRC64;

  Query Match             64.9%;  Score 37;  DB 1;  Length 513;
  Best Local Similarity   66.7%;  Pred. No. 16;
  Matches    6;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          2 WLIQLFHKK 10
              ||| |||:|
Db        264 WLITAFHEK 272


RESULT 8
AVR2_SHEEP
ID   AVR2_SHEEP     STANDARD;      PRT;   513 AA.
AC   Q28560;
DT   01-NOV-1997 (Rel. 35, Created)
DT   01-NOV-1997 (Rel. 35, Last sequence update)
DT   28-FEB-2003 (Rel. 41, Last annotation update)
DE   Activin receptor type II precursor (EC 2.7.1.37) (ACTR-II).
GN   ACVR2 OR ACTRII.
OS   Ovis aries (Sheep).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
OC   Bovidae; Caprinae; Ovis.
OX   NCBI_TaxID=9940;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   STRAIN=Romney; TISSUE=Ovarian follicle;
RA   Tisdall D.J.;
RL   Submitted (MAR-1996) to the EMBL/GenBank/DDBJ databases.
CC   -!- FUNCTION: RECEPTOR FOR ACTIVIN A, ACTIVIN B, AND INHIBIN A.
CC       INVOLVED IN TRANSMEMBRANE SIGNALING.
CC   -!- CATALYTIC ACTIVITY: ATP + a protein - ADP + a phosphoprotein.
CC   -!- SUBCELLULAR LOCATION: Type I membrane protein.
CC   -!- SIMILARITY: BELONGS TO THE SER/THR FAMILY OF PROTEIN KINASES.
CC       TGFB RECEPTOR SUBFAMILY.
CC   ---------------------------------------------------------- ------------
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CC   or send an email to license@isb-sib.ch).
CC   ---------------------------------------------------------- ------------
DR   EMBL; L19442; AAA91903.1; -.
DR   HSSP; P27038; 1BTE.
DR   InterPro; IPR000472; Activin_rec.
DR   InterPro; IPR000333; Actn_receptorII.
DR   InterPro; IPR000719; Prot_kinase.
DR   InterPro; IPR002290; Ser_thr_pkinase.
DR   Pfam; PF01064; Activin_recp; 1.
DR   Pfam; PF00069; pkinase; 1.
DR   PRINTS; PR00653; ACTIVIN2R.
DR   ProDom; PD000001; Prot_kinase; 1.
DR   PROSITE; PS00107; PROTEIN_KINASE_ATP; FALSE_NEG.
DR   PROSITE; PS00108; PROTEIN_KINASE_ST; 1.
DR   PROSITE; PS50011; PROTEIN_KINASE_DOM; 1.
KW   Receptor; Transferase; Serine/threonine-protein kinase; ATP-binding;
KW   Transmembrane; Glycoprotein; Signal.
FT   SIGNAL       1     19       POTENTIAL.
FT   CHAIN       20    513       ACTIVIN RECEPTOR TYPE II.
FT   DOMAIN      20    135       EXTRACELLULAR (POTENTIAL).
FT   TRANSMEM   136    161       POTENTIAL.
FT   DOMAIN     162    513       CYTOPLASMIC (POTENTIAL).
FT   DOMAIN     192    485       PROTEIN KINASE.
FT   NP_BIND    198    206       ATP (BY SIMILARITY).
FT   BINDING    219    219       ATP (BY SIMILARITY).
FT   ACT_SITE   322    322       BY SIMILARITY.
FT   DISULFID    30     60       BY SIMILARITY.
FT   DISULFID    50     78       BY SIMILARITY.
FT   DISULFID    85    104       BY SIMILARITY.
FT   DISULFID    91    103       BY SIMILARITY.
FT   DISULFID   105    110       BY SIMILARITY.
FT   CARBOHYD    43     43       N-LINKED (GLCNAC. . .) (POTENTIAL).
FT   CARBOHYD    66     66       N-LINKED (GLCNAC. . .) (POTENTIAL).
SQ   SEQUENCE   513 AA;  57768 MW;  7231BF9E85CA57E3 CRC64;

  Query Match             64.9%;  Score 37;  DB 1;  Length 513;
  Best Local Similarity   66.7%;  Pred. No. 16;
  Matches    6;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          2 WLIQLFHKK 10
              ||| |||:|
Db        264 WLITAFHEK 272


RESULT 9
AVR2_XENLA
ID   AVR2_XENLA     STANDARD;      PRT;   514 AA.
AC   P27039;
DT   01-AUG-1992 (Rel. 23, Created)
DT   01-AUG-1992 (Rel. 23, Last sequence update)
DT   28-FEB-2003 (Rel. 41, Last annotation update)
DE   Activin receptor type II precursor (EC 2.7.1.37) (ACTR-II).
OS   Xenopus laevis (African clawed frog).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
OC   Xenopodinae; Xenopus.
OX   NCBI_TaxID=8355;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=92095974; PubMed=1661587;
RA   Kondo M., Tashiro K., Fujii G., Asano M., Miyoshi R., Yamada R.,
RA   Muramatsu M., Shiokawa K.;
RT   "Activin receptor mRNA is expressed early in Xenopus embryogenesis
RT   and the level of the expression affects the body axis formation.";
RL   Biochem. Biophys. Res. Commun. 181:684-690(1991).
CC   -!- FUNCTION: RECEPTOR FOR ACTIVIN A, ACTIVIN B, AND INHIBIN A.
CC       INVOLVED IN TRANSMEMBRANE SIGNALING.
CC   -!- CATALYTIC ACTIVITY: ATP + a protein = ADP + a phosphoprotein.
CC   -!- SUBCELLULAR LOCATION: Type I membrane protein.
CC   -!- SIMILARITY: BELONGS TO THE SER/THR FAMILY OF PROTEIN KINASES.
CC       TGFB RECEPTOR SUBFAMILY.
CC   ---------------------------------------------------------------------
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CC   or send an email to license@isb-sib.ch).
CC   ---------------------------------------------------------------------
DR   EMBL; S70930; AAB20638.1; -.
DR   PIR; JQ1317; JQ1317.
DR   HSSP; P27038; 1BTE.
DR   InterPro; IPR000472; Activin_rec.
DR   InterPro; IPR000333; Actn_receptorII.
DR   InterPro; IPR000719; Prot_kinase.
DR   InterPro; IPR002290; Ser_thr_pkinase.
DR   InterPro; IPR001245; Tyr_pkinase.
DR   Pfam; PF01064; Activin_recp; 1.
DR   Pfam; PF00069; pkinase; 1.
DR   PRINTS; PR00653; ACTIVIN2R.
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DR   PRINTS; PR00109; TYRKINASE.
DR   ProDom; PD000001; Prot_kinase; 1.
DR   PROSITE; PS00107; PROTEIN_KINASE_ATP; FALSE_NEG.
DR   PROSITE; PS00108; PROTEIN_KINASE_ST; 1.
DR   PROSITE; PS50011; PROTEIN_KINASE_DOM; 1.
KW   Receptor; Transferase; Serine/threonine-protein kinase; ATP-binding;
KW   Transmembrane; Glycoprotein; Signal.
FT   SIGNAL        1     20
FT   CHAIN        21    514       ACTIVIN RECEPTOR TYPE II.
FT   DOMAIN       21    136       EXTRACELLULAR (POTENTIAL).
FT   TRANSMEM    137    162       POTENTIAL.
FT   DOMAIN      163    514       CYTOPLASMIC (POTENTIAL).
FT   DOMAIN      193    486       PROTEIN KINASE.
FT   NP_BIND     199    207       ATP (BY SIMILARITY).
FT   BINDING     220    220       ATP (BY SIMILARITY).
FT   ACT_SITE    323    323       BY SIMILARITY.
FT   DISULFID     31     61       BY SIMILARITY.
FT   DISULFID     51     79       BY SIMILARITY.
FT   DISULFID     86    105       BY SIMILARITY.
FT   DISULFID     92    104       BY SIMILARITY.
FT   DISULFID    106    111       BY SIMILARITY.
FT   CARBOHYD     46     46       N-LINKED (GLCNAC. . .) (POTENTIAL).
FT   CARBOHYD     67     67       N-LINKED (GLCNAC. . .) (POTENTIAL).
FT   CARBOHYD     88     88       N-LINKED (GLCNAC. . .) (POTENTIAL).
SQ   SEQUENCE   514 AA;  57903 MW;  9FA4B4D7F9756C26 CRC64;

  Query Match           64.9%;  Score 37;  DB 1;  Length 514;
  Best Local Similarity 66.7%;  Pred. No. 16;
  Matches    6;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          2 WLIQLFHKK 10
              ||| |:|:| 
Db        265 WLITAFHEK 273


RESULT 10
SEC5_HUMAN
ID   SEC5_HUMAN     STANDARD;      PRT;   924 AA.
AC   Q96KP1; Q96AN6; Q9NUZ8; Q9UJM7;
DT   28-FEB-2003 (Rel. 41, Created)
DT   28-FEB-2003 (Rel. 41, Last sequence update)
DT   15-SEP-2003 (Rel. 42, Last annotation update)
DE   Exocyst complex component Sec5.
GN   SEC5L1 OR SEC5.
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RA   Sjolinder M., Uhlmann J., Ponstingl H.;
RT   "DelGEF regulates constitutive exocytosis.";
RL   Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases.
RN   [2]
RP   SEQUENCE OF 1-793 FROM N.A.
RA   Whitaker H.;
RL   Submitted (FEB-2000) to the EMBL/GenBank/DDBJ databases.
RN   [3]
RP   SEQUENCE OF 119-924 FROM N.A.
RC   TISSUE=Breast;
RX   MEDLINE=22388257; PubMed=12477932;
RA   Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA   Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA   Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA   Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA   Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA   Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA   Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA   Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA   Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA   Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA   Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA   Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA   Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA   Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA   Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length
RT   human and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN   [4]
RP   SEQUENCE OF 143-924 FROM N.A.
RC   TISSUE=Placenta;
RA   Isogai T., Ota T., Hayashi K., Sugiyama T., Otsuki T., Suzuki Y.,
RA   Nishikawa T., Nagai K., Sugano S., Aotsuka S., Yoshikawa Y.,
RA   Matsunawa H., Ishii S., Kawai Y., Saito K., Yamamoto J., Wakamatsu A.,
RA   Nakamura Y., Nagahari K., Masuho Y., Sasaki N.;
RT   "NEDO human cDNA sequencing project.";
RL   Submitted (FEB-2000) to the EMBL/GenBank/DDBJ databases.
CC   -!- FUNCTION: Component of the exocyst complex involved in the docking
CC       of exocystic vesicles with fusions site on the plasma membrane.
CC   -!- SUBUNIT: The exocyst complex is composed of SEC3, SEC5, SEC6,
CC       SEC8, SEC10, SEC15, EXO70 and EXO84. Interacts with RALA (By
CC       similarity).
CC   -!- SIMILARITY: BELONGS TO THE SEC5 FAMILY.
CC   -!- SIMILARITY: Contains 1 TIG domain.
CC   ---------------------------------------------------------------------
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CC   or send an email to license@isb-sib.ch).
CC   ---------------------------------------------------------------------
DR   EMBL; AJ414403; CAC92092.1; -.
DR   EMBL; AL031770; CAB54145.1; -.
DR   EMBL; BC016918; AAH16918.1; ALT_INIT.
DR   EMBL; AK001888; BAA91963.1; ALT_INIT.
DR   InterPro; IPR002909; IPT_TIG.
DR   Pfam; PF01833; TIG; 1.
KW   Exocytosis; Transport; Protein transport; Coiled coil.
FT   DOMAIN        8     93       TIG.
FT   DOMAIN      240    260       COILED COIL (POTENTIAL).
FT   CONFLICT    522    522       L -> H (IN REF. 4).
SQ   SEQUENCE   924 AA;  104066 MW;  2234E463DE8B076F CRC64;

  Query Match           64.9%;  Score 37;  DB 1;  Length 924;
  Best Local Similarity 62.5%;  Pred. No. 26;
  Matches    5;  Conservative    2;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFH 8
              ||:::|| |
Db        379 KWILQLMH 386


RESULT 11
NISB_LACLA
ID   NISB_LACLA     STANDARD;      PRT;   993 AA.
AC   P20103;
DT   01-FEB-1991 (Rel. 17, Created)
DT   01-OCT-1993 (Rel. 27, Last sequence update)
DT   16-OCT-2001 (Rel. 40, Last annotation update)
DE   Nisin biosynthesis protein nisB.
GN   NISB.
OS   Lactococcus lactis (subsp. lactis) (Streptococcus lactis).
OC   Bacteria; Firmicutes; Lactobacillales; Streptococcaceae; Lactococcus.
OX   NCBI_TaxID=1360;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   STRAIN=6F3;
RX   MEDLINE=93128945; PubMed=1482192;
RA   Engelke G., Gutowski-Eckel Z., Hammelmann M., Entian K.-D.;
RT   "Biosynthesis of the lantibiotic nisin: genomic organization and
RT   membrane localization of the NisB protein.";
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RL   Appl. Environ. Microbiol. 58:3730 3743(1992).
RN   [2]
RP   SEQUENCE FROM N.A.
RC   STRAIN=NIZO R5;
RX   MEDLINE=93373937; PubMed=7689965;
RA   Kuipers O.P., Beerthuyzen M.M., Siezen R.J., de Vos W.M.;
RT   "Characterization of the nisin gene cluster nisABTCIPR of Lactococcus
RT   lactis. Requirement of expression of the nisA and nisT genes for
RT   development of immunity.";
RL   Eur. J. Biochem. 216:281-291(1993).
RN   [3]
RP   SEQUENCE OF 1-852 FROM N.A.
RC   STRAIN=ATCC 11454 / DSM 20729 / NCDO 496;
RX   MEDLINE=91282469; PubMed=1905817;
RA   Steen M.T., Chung Y.J., Hansen J.N.;
RT   "Characterization of the nisin gene as part of a polycistronic operon
RT   in the chromosome of Lactococcus lactis ATCC 11454.";
RL   Appl. Environ. Microbiol. 57:1181-1188(1991).
RN   [4]
RP   SEQUENCE OF 1-63 FROM N.A.
RC   STRAIN=ATCC 11454 / DSM 20729 / NCDO 496;
RX   MEDLINE=89034093; PubMed=3141403;
RA   Buchman G.W., Banerjee S., Hansen J.N.;
RT   "Structure, expression, and evolution of a gene encoding the
RT   precursor of nisin, a small protein antibiotic.";
RL   J. Biol. Chem. 263:16260-16266(1988).
RN   [5]
RP   SEQUENCE OF 1-7 FROM N.A.
RC   STRAIN=JCM 7638;
RA   Araya T., Ishibashi N., Shimamura S.;
RT   "Genetic evidence that Lactococcus lactis JCM7638 produces a mutated
RT   form of nisin.";
RL   J. Gen. Appl. Microbiol. 38:271-278(1992).
CC   -!- FUNCTION: INVOLVED IN THE POSTTRANSLATIONAL MODIFICATION OF THE
CC       LANTIBIOTIC NISIN.
CC   -!- SUBCELLULAR LOCATION: POSSIBLY ASSOCIATED WITH, AND ANCHORED TO,
CC       THE CYTOPLASMIC SIDE OF THE MEMBRANE.
CC   -!- SIMILARITY: TO B.SUBTILIS SPAB AND S.EPIDERMIDIS EPIB.
CC   ---------------------------------------------------------------------
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CC   or send an email to license@isb-sib.ch).
CC   ---------------------------------------------------------------------
DR   EMBL; X68307; CAA48381.1; -.
DR   EMBL; L16225; AAA25190.1; -.
DR   EMBL; M65089; AAA73039.1; -.
DR   EMBL; J04057; AAA88607.1; -.
DR   EMBL; D10768; BAA01599.1; -.
DR   PIR; S36735; C31915.
DR   InterPro; IPR006827; Lant_dehyd_C.
DR   InterPro; IPR006826; Lant_dehyd_N.
DR   Pfam; PF04738; Lant_dehyd_C; 1.
DR   Pfam; PF04737; Lant_dehyd_N; 1.
KW   Transport; Transmembrane.
FT   TRANSMEM    838    851       POTENTIAL.
FT   CONFLICT     19     19       C -> S (IN REF. 2 AND 3).
FT   CONFLICT     656    656      K -> E (IN REF. 2 AND 3).
FT   CONFLICT     841    852      CADSKTIPNLLT -> VPILKLFQICLH (IN REF. 3).
FT   CONFLICT     895    895      T -> P (IN REF. 2).
SQ   SEQUENCE   993 AA;  117501 MW;  0027053BEAE71E2D CRC64;

  Query Match             64.9%;  Score 37;  DB 1;  Length 993;
  Best Local Similarity   66.7%;  Pred. No. 30;
  Matches    6;  Conservative    2;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHK 9
              :|||:| ||
Db        123 QWLIRLVHK 131
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RESULT 12
VSGP_EBOIC
ID   VSGP_EBOIC     STANDARD;      PRT:   365 AA.
AC   Q66811;
DT   16-OCT-2001 (Rel. 40, Created)
DT   16-OCT-2001 (Rel. 40, Last sequence update)
DT   16-OCT-2001 (Rel. 40, Last annotation update)
DE   Small/secreted glycoprotein precursor (SGP).
GN   GP.
OS   Ebola virus (strain Ivory coast-94) (Ebo).
OC   Viruses; ssRNA negative-strand viruses; Mononegavirales; Filoviridae;
OC   Ebola-like viruses.
OX   NCBI_TaxID=128999;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=96195018; PubMed=8622982;
RA   Sanchez A., Trappier S.G., Mahy B.W.J., Peters C.J., Nichol S.T.;
RT   "The virion glycoproteins of Ebola viruses are encoded in two reading
RT   frames and are expressed through transcriptional editing.";
RL   Proc. Natl. Acad. Sci. U.S.A. 93:3602-3607(1996).
CC   -!- SUBCELLULAR LOCATION: Secreted.
CC   -!- SIMILARITY: BELONGS TO THE FILOVIRUSES GLYCOPROTEIN FAMILY.
CC   ---------------------------------------------------------------------
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CC   or send an email to license@isb-sib.ch).
CC   ---------------------------------------------------------------------
DR   EMBL; U28006; AAB37092.1; -.
DR   InterPro; IPR002561; Filo_glycop.
DR   Pfam; PF01611; Filo_glycop; 1.
KW   Glycoprotein; Signal.
FT   SIGNAL        1     32       POTENTIAL.
FT   CHAIN        33    365       SMALL/SECRETED GLYCOPROTEIN.
FT   CARBOHYD     40     40       N-LINKED (GLCNAC. . .) (POTENTIAL).
FT   CARBOHYD    204    204       N-LINKED (GLCNAC. . .) (POTENTIAL).
FT   CARBOHYD    228    228       N-LINKED (GLCNAC. . .) (POTENTIAL).
FT   CARBOHYD    257    257       N-LINKED (GLCNAC. . .) (POTENTIAL).
FT   CARBOHYD    268    268       N-LINKED (GLCNAC. . .) (POTENTIAL).
SQ   SEQUENCE   365 AA;  41689 MW;  D2D39579392F9C28 CRC64;

  Query Match             63.2%;  Score 36;  DB 1;  Length 365;
  Best Local Similarity   75.0%;  Pred. No. 17;
  Matches    6;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          2 WLIQLFHK 9
              |:: |||.
Db         22 WVIILFHK 29


RESULT 13
CG21_ANTMA
ID   CG21_ANTMA     STANDARD;      PRT:   473 AA.
AC   P34800;
DT   01-FEB-1994 (Rel. 28, Created)
DT   01-FEB-1994 (Rel. 28, Last sequence update)
DT   16-OCT-2001 (Rel. 40, Last annotation update)
DE   G2/mitotic-specific cyclin 1.
OS   Antirrhinum majus (Garden snapdragon).
OC   Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC   Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
OC   Asteridae; lamiids; Lamiales; Antirrhinaceae; Antirrhineae;
OC   Antirrhinum.
OX   NCBI_TaxID=4151;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=94148008; PubMed=8313906;
RA   Fobert P.R., Coen E.S., Murphy G.J.P., Doonan J.H.;
RT   "Patterns of cell division revealed by transcriptional regulation of
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RT   genes during the cell cycle in plants.";
RL   EMBO J. 13:616-624(1994).
CC   -!- FUNCTION: ESSENTIAL FOR THE CONTROL OF THE CELL CYCLE AT THE G2/M
CC       (MITOSIS) TRANSITION. G2/M CYCLINS ACCUMULATE STEADILY DURING G2
CC       AND ARE ABRUPTLY DESTROYED AT MITOSIS.
CC   -!- SUBUNIT: INTERACTS WITH THE CDC2 AND CDK2 PROTEIN KINASES TO FORM
CC       A SERINE/THREONINE KINASE HOLOENZYME COMPLEX. THE CYCLIN SUBUNIT
CC       IMPARTS SUBSTRATE SPECIFICITY TO THE COMPLEX.
CC   -!- DEVELOPMENTAL STAGE: ACCUMULATES STEADILY DURING G2 AND IS
CC       ABRUPTLY DESTROYED AT MITOSIS.
CC   -!- SIMILARITY: BELONGS TO THE CYCLIN FAMILY. CYCLIN AB SUBFAMILY.
CC   ----------------------------------------------------------------------
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CC   or send an email to license@isb-sib.ch).
CC   ----------------------------------------------------------------------
DR   EMBL; X76122; CAA53728.1; -.
DR   PIR; S41709; S41709.
DR   HSSP; P30274; 1VIN.
DR   InterPro; IPR006670; Cyclin.
DR   InterPro; IPR004367; Cyclin_Cterm.
DR   InterPro; IPR006671; Cyclin_N.
DR   Pfam; PF00134; cyclin; 1.
DR   Pfam; PF02984; cyclin_C; 1.
DR   SMART; SM00385; CYCLIN; 2.
DR   PROSITE; PS00292; CYCLINS; 1.
KW   Cyclin; Cell cycle; Cell division; Mitosis.
SQ   SEQUENCE   473 AA;  52704 MW;  502CF1735587638A CRC64;

  Query Match          63.2%;  Score 36;  DB 1;  Length 473;
  Best Local Similarity  62.5%;  Pred. No. 22;
  Matches    5;  Conservative    2;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          2 WDIQLFHK 9
              |:|: ||
Db        232 WLVQVHHK 239


RESULT 14
LBP_HUMAN
ID   LBP_HUMAN      STANDARD;      PRT;   481 AA.
AC   P18428; O43438; Q92672; Q9H403; Q9UD66;
DT   01-NOV-1990 (Rel. 16, Created)
DT   15-DEC-1998 (Rel. 37, Last sequence update)
DT   28-FEB-2003 (Rel. 41, Last annotation update)
DE   Lipopolysaccharide-binding protein precursor (LBP).
GN   LBP.
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=90385281; PubMed=2402637;
RA   Schumann R.R., Leong S.R., Flaggs G.W., Gray P.W., Wright S.D.,
RA   Mathison J.C., Tobias P.S., Ulevitch R.J.;
RT   "Structure and function of lipopolysaccharide binding protein.";
RL   Science 249:1429-1431(1990).
RN   [2]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=94292492; PubMed=7517398;
RA   Wilde C.G., Seilhamer J.J., McGrogan M., Ashton N., Snable J.L.,
RA   Lane J.C., Leong S.R., Thornton M.B., Miller K.L., Scott R.W.;
RT   "Bactericidal/permeability-increasing protein and lipopolysaccharide
RT   (LPS)-binding protein. LPS binding properties and effects on LPS-
RT   mediated cell activation.";
RL   J. Biol. Chem. 269:17411-17416(1994).
RN   [3]
RP   SEQUENCE FROM N.A.
RA   Hubacek J.A., Aslanidis C., Schmitz G.;
RL   Submitted (OCT-1996) to the EMBL/GenBank/DDBJ databases.
RN   [4]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=98110577; PubMed=9441745;
RA   Kirschning C.J., Au-Young J., Lamping N., Reuter D., Pfeil D.,
RA   Seilhamer J.J., Schumann R.R.;
RT   "Similar organization of the lipopolysaccharide-binding protein (LBP)
RT   and phospholipid transfer protein (PLTP) genes suggests a common gene
RT   family of lipid-binding proteins.";
RL   Genomics 46:416-425(1997).
RN   [5]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Liver;
RA   Long J.Y., Liu J.Q., Xue Y.N., Wang H.X.;
RT   "Cloning and sequencing of human lipopolysaccharide-binding protein
RT   gene.";
RL   Sheng Wu Huaxue Yu Shengwu Wuli Jinzhan 25:469-471(1998).
RN   [6]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=21638749; PubMed=11780052;
RA   Deloukas P., Matthews L.H., Ashurst J., Burton J., Gilbert J.G.R.,
RA   Jones M., Stavrides G., Almeida J.P., Babbage A.K., Bagguley C.L.,
RA   Bailey J., Barlow K.F., Bates K.N., Beard L.M., Beare D.M.,
RA   Beasley O.P., Bird C.P., Blakey S.E., Bridgeman A.M., Brown A.J.,
RA   Buck D., Burrill W.D., Butler A.P., Carder C., Carter N.P.,
RA   Chapman J.C., Clamp M., Clark G., Clark L.N., Clark S.Y., Clee C.M.,
RA   Clegg S., Cobley V.E., Collier R.E., Connor R.E., Corby N.R.,
RA   Coulson A., Coville G.J., Deadman R., Dhami P.D., Dunn M.,
RA   Ellington A.G., Frankland J.A., Fraser A., French L., Garner P.,
RA   Grafham D.V., Griffiths C., Griffiths M.N.D., Gwilliam R., Hall R.E.,
RA   Hammond S., Harley J.L., Heath P.D., Ho S., Holden J.L., Howden P.J.,
RA   Huckle E., Hunt A.R., Hunt S.E., Jekosch K., Johnson C.M., Johnson D.,
RA   Kay M.P., Kimberley A.M., King A., Knights A., Laird G.K., Lawlor S.,
RA   Lehvaeslaiho M.H., Leversha M.A., Lloyd C., Lloyd D.M., Lovell J.D.,
RA   Marsh V.L., Martin S.L., McConnachie L.J., McLay K., McMurray A.A.,
RA   Milne S.A., Mistry D., Moore M.J.F., Mullikin J.C., Nickerson T.,
RA   Oliver K., Parker A., Patel R., Pearce T.A.V., Peck A.I.,
RA   Phillimore B.J.C.T., Prathalingam S.R., Plumb R.W., Ramsay H.,
RA   Rice C.M., Ross M.T., Scott C.E., Sehra H.K., Shownkeen R., Sims S.,
RA   Skuce C.D., Smith M.L., Soderlund C., Steward C.A., Sulston J.E.,
RA   Swann R.M., Sycamore N., Taylor R., Tee L., Thomas D.W., Thorpe A.,
RA   Tracey A., Tromans A.C., Vaudin M., Wall M., Wallis J.M.,
RA   Whitehead S.L., Whittaker P., Willey D.L., Williams L., Williams S.A.,
RA   Wilming L., Wray P.W., Hubbard T., Durbin R.M., Bentley D.R., Beck S.,
RA   Rogers J.;
RT   "The DNA sequence and comparative analysis of human chromosome 20.";
RL   Nature 414:865-871(2001).
RN   [7]
RP   SEQUENCE OF 1-41 FROM N.A.
RA   Sutton C.L., Smith R.I.F., Centola M.B., Theofan G.;
RL   Submitted (MAY-1995) to the EMBL/GenBank/DDBJ databases.
RN   [8]
RP   3D-STRUCTURE MODELING.
RX   MEDLINE=98227852; PubMed=9568897;
RA   Beamer L.J., Carroll S.F., Eisenberg D.;
RT   "The BPI/LBP family of proteins: a structural analysis of conserved
RT   regions.";
RL   Protein Sci. 7:906-914(1998).
CC   -!- FUNCTION: BINDS TO THE LIPID A MOIETY OF BACTERIAL
CC       LIPOPOLYSACCHARIDES (LPS), A GLYCOLIPID PRESENT IN THE OUTER
CC       MEMBRANE OF ALL GRAM-NEGATIVE BACTERIA. THE LBP/LPS COMPLEX SEEMS
CC       TO INTERACT WITH THE CD14 RECEPTOR.
CC   -!- SIMILARITY: BELONGS TO THE BPI/CETP/LBP/PLTP FAMILY.
CC   ----------------------------------------------------------------------
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CC   ----------------------------------------------------------------------
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DR   EMBL; M35533; AAA59493.1; -.
DR   EMBL; X98657; CAA67226.1; -.
DR   EMBL; X98658; CAA67226.1; JOINED.
DR   EMBL; X98659; CAA67226.1; JOINED.
DR   EMBL; X98660; CAA67226.1; JOINED.
DR   EMBL; X98661; CAA67226.1; JOINED.
DR   EMBL; X98662; CAA67226.1; JOINED.
DR   EMBL; X98663; CAA67226.1; JOINED.
DR   EMBL; X98664; CAA67226.1; JOINED.
DR   EMBL; X98665; CAA67226.1; JOINED.
DR   EMBL; X98666; CAA67226.1; JOINED.
DR   EMBL; X98667; CAA67226.1; JOINED.
DR   EMBL; X98668; CAA67226.1; JOINED.
DR   EMBL; AF013512; AAC39547.1; -.
DR   EMBL; AF013500; AAC39547.1; JOINED.
DR   EMBL; AF013501; AAC39547.1; JOINED.
DR   EMBL; AF013502; AAC39547.1; JOINED.
DR   EMBL; AF013503; AAC39547.1; JOINED.
DR   EMBL; AF013504; AAC39547.1; JOINED.
DR   EMBL; AF013505; AAC39547.1; JOINED.
DR   EMBL; AF013506; AAC39547.1; JOINED.
DR   EMBL; AF013507; AAC39547.1; JOINED.
DR   EMBL; AF013508; AAC39547.1; JOINED.
DR   EMBL; AF013509; AAC39547.1; JOINED.
DR   EMBL; AF013510; AAC39547.1; JOINED.
DR   EMBL; AF013511; AAC39547.1; JOINED.
DR   EMBL; AF105067; AAD21962.1; -.
DR   EMBL; AL080249; CAC10462.1; -.
DR   EMBL; L42172; AAA66446.1; -.
DR   PIR; A35843; A35843.
DR   PIR; A54136; A54136.
DR   HSSP; P17213; 1BP1.
DR   Genew; HGNC:6517; LBP.
DR   MIM; 151990; -.
DR   GO; GO:0005615; C:extracellular space; TAS.
DR   GO; GO:0006953; P:acute-phase response; TAS.
DR   GO; GO:0006968; P:cellular defense response; TAS.
DR   GO; GO:0009618; P:response to pathogenic bacteria; TAS.
DR   InterPro; IPR001124; LBP_BPI_CETP.
DR   Pfam; PF01273; LBP_BPI_CETP; 1.
DR   Pfam; PF02886; LBP_BPI_CETP_C; 1.
DR   SMART; SM00328; BPI1; 1.
DR   SMART; SM00329; BPI2; 1.
DR   PROSITE; PS00400; LBP_BPI_CETP; 1.
KW   Lipid transport; Antibiotic; Transmembrane; Glycoprotein; Signal.
FT   SIGNAL        1     25
FT   CHAIN        26    481       LIPOPOLYSACCHARIDE-BINDING PROTEIN.
FT   CARBOHYD     300    300       N-LINKED (GLCNAC. . .) (POTENTIAL).
FT   CARBOHYD     355    355       N-LINKED (GLCNAC. . .) (POTENTIAL).
FT   CARBOHYD     386    386       N-LINKED (GLCNAC. . .) (POTENTIAL).
FT   CARBOHYD     394    394       N-LINKED (GLCNAC. . .) (POTENTIAL).
FT   CONFLICT       6      6       R -> H (IN REF. 2).
FT   CONFLICT      22     22       E -> C (IN REF. 2).
FT   CONFLICT      82     82       N -> K (IN REF. 4).
FT   CONFLICT     128    128       S -> F (IN REF. 4).
FT   CONFLICT     154    157       VTAS -> GYCL (IN REF. 1).
FT   CONFLICT     174    174       L -> S (IN REF. 1).
FT   CONFLICT     257    257       R -> S (IN REF. 4).
FT   CONFLICT     266    270       VMSLP -> A (IN REF. 1).
FT   CONFLICT     369    369       L -> H (IN REF. 4).
FT   CONFLICT     436    436       L -> F (IN REF. 2, 4 AND 5).
SQ   SEQUENCE   481 AA;  53349 MW;  816E4B9E5E6864D0 CRC64;

  Query Match             63.2%;  Score 36;  DB 1;  Length 481;
  Best Local Similarity   55.6%;  Pred. No. 23;
  Matches    5;  Conservative    2;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          2 WLIQLFHKK 10
              ||: ||| :
Db        176 WLLNLFHNQ 184


RESULT 15
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LBP_MOUSE
ID   LBP_MOUSE      STANDARD;      PRT;   481 AA.
AC   Q61805; Q99KA0;
DT   01-NOV-1997 (Rel. 35, Created)
DT   01-NOV-1997 (Rel. 35, Last sequence update)
DT   15-SEP-2003 (Rel. 42, Last annotation update)
DE   Lipopolysaccharide-binding protein precursor (LBP).
GN   LBP.
OS   Mus musculus (Mouse).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX   NCBI_TaxID=10090;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   STRAIN=BALB/c;
RX   MEDLINE=97289150; PubMed=9144073;
RA   Lengacher S., Jongeneel C.V., le Roy D., Lee C.D., Kravchenko V.,
RA   Ulevitch R.J., Glauser M.P., Heumann D.;
RT   "Reactivity of murine and human recombinant LPS-binding protein (LBP)
RT   within LPS and Gram-negative bacteria.";
RL   J. Inflamm. 47:165-172(1995).
RN   [2]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=22388257; PubMed=12477932;
RA   Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA   Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA   Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA   Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA   Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA   Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA   Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA   Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA   Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA   Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA   Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA   Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA   Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA   Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA   Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length
RT   human and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
CC   -!- FUNCTION: BINDS TO THE LIPID A MOIETY OF BACTERIAL
CC       LIPOPOLYSACCHARIDES (LPS), A GLYCOLIPID PRESENT IN THE OUTER
CC       MEMBRANE OF ALL GRAM-NEGATIVE BACTERIA. THE LBP/LPS COMPLEX SEEMS
CC       TO INTERACT WITH THE CD14 RECEPTOR.
CC   -!- SIMILARITY: BELONGS TO THE BPI/CETP/LBP/PLTP FAMILY.
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CC   or send an email to license@isb-sib.ch).
CC   ----------------------------------------------------------------------
DR   EMBL; X99347; CAA67727.1; -.
DR   EMBL; BC004795; AAH04795.1; -.
DR   HSSP; P17213; 1BP1.
DR   MGD; MGI:1098776; Lbp.
DR   GO; GO:0001530; F:lipopolysaccharide binding activity; IDA.
DR   InterPro; IPR001124; LBP_BPI_CETP.
DR   Pfam; PF01273; LBP_BPI_CETP; 1.
DR   Pfam; PF02886; LBP_BPI_CETP_C; 1.
DR   SMART; SM00328; BPI1; 1.
DR   SMART; SM00329; BPI2; 1.
DR   PROSITE; PS00400; LBP_BPI_CETP; 1.
KW   Lipid transport; Antibiotic; Transmembrane; Glycoprotein; Signal.
FT   SIGNAL        1     24       POTENTIAL.
FT   CHAIN        25    481       LIPOPOLYSACCHARIDE-BINDING PROTEIN.
FT   CARBOHYD     300    300       N-LINKED (GLCNAC. . .) (POTENTIAL).
```

```
FT   CARBOHYD    355    355       N-LINKED (GLCNAC. . .) (POTENTIAL).
FT   CONFLICT     25     25       C -> G (IN REF. 2).
FT   CONFLICT     51     51       K -> Q (IN REF. 2).
FT   CONFLICT    102    102       R -> S (IN REF. 2).
FT   CONFLICT    280    280       A -> S (IN REF. 2).
FT   CONFLICT    310    310       H -> P (IN REF. 2).
FT   CONFLICT    313    313       G -> S (IN REF. 2).
FT   CONFLICT    341    341       R -> G (IN REF. 2).
FT   CONFLICT    382    382       S -> G (IN REF. 2).
FT   CONFLICT    395    396       TR -> NS (IN REF. 2).
FT   CONFLICT    418    418       I -> M (IN REF. 2).
SQ   SEQUENCE   481 AA;  53312 MW;  34EA9C066C9AB678 CRC64;

  Query Match             63.2%;  Score 36;  DB 1;  Length 481;
  Best Local Similarity   55.6%;  Pred. No. 23;
  Matches    5;  Conservative    2;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          2 WLIQLFHKK 10
              ||: ||| :
Db        176 WLLNLFHNQ 184


Search completed: October 1, 2003, 09:07:10
Job time : 14 secs
```

GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: October 1, 2003, 09:06:03 ; Search time 34 Seconds
(without alignments)
75.898 Million cell updates/sec

Title: US-09-881-490-126
Perfect score: 57
Sequence: 1 KWLIQLFHKK 10

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 830525 seqs, 258052604 residues

Total number of hits satisfying chosen parameters: 830525

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : SPTREMBL_23:*
1: sp_archea:*
2: sp_bacteria:*
3: sp_fungi:*
4: sp_human:*
5: sp_invertebrate:*
6: sp_mammal:*
7: sp_mhc:*
8: sp_organelle:*
9: sp_phage:*
10: sp_plant:*
11: sp_rodent:*
12: sp_virus:*
13: sp_vertebrate:*
14: sp_unclassified:*
15: sp_rvirus:*
16: sp_bacteriap:*
17: sp_archeap:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	52	91.2	487	4	Q8IW58	Q8iw58 homo sapien
2	45	78.9	486	11	Q8BSF3	Q8bsf3 mus musculu
3	43	75.4	146	16	Q9CBG1	Q9cbg1 lactococcus
4	43	75.4	178	6	Q9GK40	Q9gk40 oryctolagus
5	42	73.7	221	16	Q9K959	Q9k959 bacillus ha
6	42	73.7	904	4	Q9H0B2	Q9h0b2 homo sapien
7	42	73.7	1765	4	Q99666	Q99666 homo sapien
8	41	71.9	649	5	Q9U3V1	Q9u3v1 cryptospori
9	41	71.9	1142	5	Q22528	Q22528 caenorhabdi
10	40	70.2	179	6	Q9GK39	Q9gk39 macaca mula
11	40	70.2	290	12	Q81875	Q81875 hepatitis c
12	40	70.2	464	5	Q8IDH8	Q8idh8 plasmodium
13	40	70.2	3053	11	Q9ERU9	Q9eru9 mus musculu
14	39	68.4	567	10	Q9SPN0	Q9spn0 artemisia a
15	38	66.7	683	10	Q8S2M2	Q8s2m2 oryza sativ
16	37	64.9	96	12	Q9QU28	Q9qu28 tt virus. o
17	37	64.9	97	12	Q9QTX0	Q9qtx0 tt virus. o
18	37	64.9	136	2	Q50280	Q50280 mycoplasma
19	37	64.9	159	2	Q8GRA3	Q8gra3 lactococcus
20	37	64.9	175	6	Q9GLC1	Q9glc1 sus scrofa
21	37	64.9	183	2	Q8RTL2	Q8rtl2 lactococcus
22	37	64.9	232	12	Q9J5H0	Q9j5h0 fowlpox vir
23	37	64.9	272	16	Q988Y8	Q988y8 rhizobium l
24	37	64.9	292	13	Q9PSG1	Q9psg1 gallus gall
25	37	64.9	345	12	O55796	O55796 edge hill v
26	37	64.9	368	2	Q8VQ01	Q8vq01 lactococcus
27	37	64.9	375	12	O90759	O90759 fowlpox vir
28	37	64.9	404	2	Q9F7T0	Q9f7t0 uncultured
29	37	64.9	478	16	Q926K2	Q926k2 listeria in
30	37	64.9	512	13	Q9PSM0	Q9psm0 xenopus lae
31	37	64.9	513	11	Q8BRV4	Q8brv4 mus musculu
32	37	64.9	513	13	Q90745	Q90745 gallus gall
33	37	64.9	513	13	Q90669	Q90669 gallus gall
34	37	64.9	993	2	Q48673	Q48673 lactococcus
35	37	64.9	1437	5	Q9GQ51	Q9gq51 dictyosteli
36	36.5	64.0	591	8	P92293	P92293 elsholtzia
37	36.5	64.0	684	8	O19827	O19827 drymonia ur
38	36.5	64.0	708	10	Q9FY15	Q9fy15 maurandya s
39	36.5	64.0	721	8	Q9TH25	Q9thz5 fagraea sp.
40	36	63.2	67	10	Q8LC31	Q8lc31 arabidopsis
41	36	63.2	67	10	Q8GYM5	Q8gym5 arabidopsis
42	36	63.2	77	12	Q9W7Y0	Q9w7y0 hepatitis e
43	36	63.2	133	12	Q99HP4	Q99hp4 hepatitis e
44	36	63.2	133	12	Q99HP1	Q99hp1 hepatitis e
45	36	63.2	134	12	Q99HP9	Q99hp9 hepatitis e

ALIGNMENTS

RESULT 1
Q8IW58
ID Q8IW58 PRELIMINARY; PRT; 487 AA.
AC Q8IW58;
DT 01-MAR-2003 (TrEMBLrel. 23, Created)
DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE Similar to bactericidal/permeability-increasing protein.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC *TISSUE=Blood;*
RA Strausberg R.;
RL Submitted (DEC-2002) to the EMBL/GenBank/DDBJ databases.
DR EMBL; BC040955; AAH40955.1; -.
SQ SEQUENCE 487 AA; 53880 MW; FE709D9317E5206D CRC64;

Query Match 91.2%; Score 52; DB 4; Length 487;
Best Local Similarity 100.0%; Pred. No. 0.21;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 WLIQLFHKK 10
||||||:||
Db 184 WLIQLFHKK 192

RESULT 2
Q8BSF3
ID Q8BSF3 PRELIMINARY; PRT; 486 AA.
AC Q8BSF3;
DT 01-MAR-2003 (TrEMBLrel. 23, Created)
DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE Weakly similar to bactericidal/permeability-increasing protein
DE precursor.
OS Mus musculus (Mouse).

```
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX   NCBI_TaxID=10090;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   STRAIN=C57BL/6J; TISSUE=Epididymis;
RX   MEDLINE=22354683; PubMed=12466851;
RA   The FANTOM Consortium,
RA   the RIKEN Genome Exploration Research Group Phase I & II Team;
RT   "Analysis of the mouse transcriptome based on functional annotation of
RT   60,770 full-length cDNAs.";
RL   Nature 420:563-573(2002).
DR   EMBL; AK033770; BAC28468.1; -.
SQ   SEQUENCE   486 AA;  54351 MW;  9D8F627EA5496D62 CRC64;

  Query Match             78.9%;  Score 45;  DB 11;  Length 486;
  Best Local Similarity   77.8%;  Pred. No. 4;
  Matches    7;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          2 WLIQLFHKK 10
              ||::|||:|
Db        179 WLIRLFHRK 187


RESULT 3
Q9CHG1
ID   Q9CHG1      PRELIMINARY;      PRT;   146 AA.
AC   Q9CHG1;
DT   01-JUN-2001 (TrEMBLrel. 17, Created)
DT   01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
DT   01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE   Transcriptional regulator.
GN   RMAG OR LL0770.
OS   Lactococcus lactis (subsp. lactis) (Streptococcus lactis).
OC   Bacteria; Firmicutes; Lactobacillales; Streptococcaceae; Lactococcus.
OX   NCBI_TaxID=1360;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   STRAIN=IL1403;
RX   MEDLINE=21235186; PubMed=11337471;
RA   Bolotin A., Wincker P., Mauger S., Jaillon O., Malarme K.,
RA   Weissenbach J., Ehrlich S.D., Sorokin A.;
RT   "The complete genome sequence of the lactic acid bacterium Lactococcus
RT   lactis ssp. lactis IL1403.";
RL   Genome Res. 11:731-753(2001).
CC   -!- SIMILARITY: BELONGS TO THE MARR FAMILY OF TRANSCRIPTIONAL
CC       REGULATORS.
DR   EMBL; AE006310; AAK04868.1; -.
DR   InterPro; IPR000835; HTH_MarR.
DR   Pfam; PF01047; MarR; 1.
DR   PRINTS; PR00598; HTHMARR.
DR   SMART; SM00347; HTH_MARR; 1.
KW   DNA-binding; Transcription regulation; Complete proteome.
SQ   SEQUENCE   146 AA;  16808 MW;  30CF04E38EB45953 CRC64;

  Query Match             75.4%;  Score 43;  DB 16;  Length 146;
  Best Local Similarity   87.5%;  Pred. No. 3.2;
  Matches    7;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFH 8
              :||.|:||
Db         10 EWLIQLFH 17


RESULT 4
Q9GK40
ID   Q9GK40      PRELIMINARY;      PRT;   178 AA.
AC   Q9GK40;
DT   01-MAR-2001 (TrEMBLrel. 16, Created)
DT   01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT   01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE   Bactericidal/permeability-increasing protein (Fragment).
OS   Oryctolagus cuniculus (Rabbit).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
OX   NCBI_TaxID=9986;
RN   [1]
RP   SEQUENCE FROM N.A.
RA   Xu J., Wang H.;
RT   "Cloning of cDNA of rabbit bactericidal/permeability-increasing
RT   protein amino-terminal fragment.";
RL   Submitted (NOV-2000) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; AF322586; AAG42842.1; -.
DR   HSSP; P17213; 1BP1.
DR   InterPro; IPR001124; LBP_BPI_CETP.
DR   Pfam; PF01273; LBP_BPI_CETP; 1.
DR   SMART; SM00328; BPI1; 1.
FT   NON_TER       1      1
FT   NON_TER     178    178
SQ   SEQUENCE   178 AA;  19693 MW;  867D7C6CA14B3A75 CRC64;

  Query Match             75.4%;  Score 43;  DB 6;  Length 178;
  Best Local Similarity   66.7%;  Pred. No. 3.8;
  Matches    6;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          2 WLIQLFHKK 10
              ||:::||||:
Db        142 WLLKLFHKR 150


RESULT 5
Q9K959
ID   Q9K959      PRELIMINARY;      PRT;   221 AA.
AC   Q9K959;
DT   01-OCT-2000 (TrEMBLrel. 15, Created)
DT   01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT   01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
DE   Mutants block sporulation after engulfment.
GN   SPOIIIAG OR BH2791.
OS   Bacillus halodurans.
OC   Bacteria; Firmicutes; Bacillales; Bacillaceae; Bacillus.
OX   NCBI_TaxID=86665;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   STRAIN=C-125 / JCM 9153;
RX   MEDLINE=20512582; PubMed=11058132;
RA   Takami H., Nakasone K., Takaki Y., Maeno G., Sasaki R., Masui N.,
RA   Fuji F., Hirama C., Nakamura Y., Ogasawara N., Kuhara S.,
RA   Horikoshi K.;
RT   "Complete genome sequence of the alkaliphilic bacterium Bacillus
RT   halodurans and genomic sequence comparison with Bacillus subtilis.";
RL   Nucleic Acids Res. 28:4317-4331(2000).
DR   EMBL; AP001516; BAB06510.1; -.
KW   Complete proteome.
SQ   SEQUENCE   221 AA;  25145 MW;  5A667DEFD5F9957A CRC64;

  Query Match             73.7%;  Score 42;  DB 16;  Length 221;
  Best Local Similarity   70.0%;  Pred. No. 7;
  Matches    7;  Conservative    2;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              :|| :||||!
Db         10 QWLKKLFHKK 19


RESULT 6
Q9H0B2
ID   Q9H0B2      PRELIMINARY;      PRT;   904 AA.
AC   Q9H0B2;
DT   01-MAR-2001 (TrEMBLrel. 16, Created)
DT   01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT   01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE   Hypothetical protein.
GN   DKFZP434P144.
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
```

```
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Testis;
RX   MEDLINE=21154917; PubMed=11230166;
RA   Wiemann S., Weil B., Wellenreuther R., Gassenhuber J., Glassl S.,
RA   Ansorge W., Boecher M., Bloecker H., Bauersachs S., Blum H.,
RA   Lauber J., Duesterhoeft A., Beyer A., Koehrer K., Strack N.,
RA   Mewes H.W., Ottenwaelder B., Obermaier B., Tampe J., Heubner D.,
RA   Wambutt R., Korn B., Klein M., Poustka A.;
RT   "Towards a Catalog of Human Genes and Proteins: Sequencing and
RT   Analysis of 500 Novel Complete Protein Coding Human cDNAs.";
RL   Genome Res. 11:422-435(2001).
DR   EMBL; AL136868; CAB66802.1; -.
DR   InterPro; IPR001440; TPR.
DR   Pfam; PF00515; TPR; 1.
KW   Hypothetical protein.
SQ   SEQUENCE   904 AA;  103333 MW;  32030C739F6E72EE CRC64;

  Query Match             73.7%;  Score 42;  DB 4;  Length 904;
  Best Local Similarity   77.8%;  Pred. No. 24;
  Matches    7;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHK 9
              ||| |||| :
Db        456 KWLKQLFHR 464


RESULT 7
Q99666
ID   Q99666      PRELIMINARY;      PRT;  1765 AA.
AC   Q99666;
DT   01-MAY-1997 (TrEMBLrel. 03, Created)
DT   01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT   01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
DE   Sperm membrane protein BS-63.
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Testis;
RX   MEDLINE=99201789; PubMed=10101573;
RA   Wang L.F., Zhu H.D., Miao S.Y., Cao D.F., Wu Y.W., Zong S.D.,
RA   Koide S.S.;
RT   "Molecular cloning and characterization of a novel testis-specific
RT   nucleoporin-related gene.";
RL   Arch. Androl. 42:71-84(1999).
RN   [2]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Testis;
RA   Wang L.;
RL   Submitted (JUL-1996) to the EMBL/GenBank/DDBJ databases.
RN   [3]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Testis;
RA   Miao S.;
RL   Submitted (AUG-1999) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; U64675; AAB41848.2; -.
DR   HSSP; P49792; 1RRP.
DR   Genew; HGNC:9849; RANBP2L1.
DR   InterPro; IPR000697; EVH1.
DR   InterPro; IPR000237; GRIP_domain.
DR   InterPro; IPR000156; Ran_BP1.
DR   InterPro; IPR001440; TPR.
DR   Pfam; PF01465; GRIP; 1.
DR   Pfam; PF00638; Ran_BP1; 2.
DR   Pfam; PF00515; TPR; 1.
DR   SMART; SM00160; RanBD; 2.
DR   PROSITE; PS50196; RANBD1; 2.
SQ   SEQUENCE   1765 AA;  198739 MW;  B6E527AA73A8E93A CRC64;

  Query Match             73.7%;  Score 42;  DB 4;  Length 1765;
  Best Local Similarity   77.8%;  Pred. No. 44;
  Matches    7;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHK 9
              ||| |||| :
Db        456 KWLKQLFHR 464


RESULT 8
Q9U3V1
ID   Q9U3V1      PRELIMINARY;      PRT;  649 AA.
AC   Q9U3V1;
DT   01-MAY-2000 (TrEMBLrel. 13, Created)
DT   01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT   01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE   Putative telomeric DNA binding protein.
GN   TRF1.
OS   Cryptosporidium parvum.
OC   Eukaryota; Alveolata; Apicomplexa; Coccidia; Eimeriida;
OC   Cryptosporidiidae; Cryptosporidium.
OX   NCBI_TaxID=5807;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=99448690; PubMed=10519245;
RA   Liu C., Abrahamsen M.S.;
RT   "Identification of a putative telomeric repeat DNA binding factor of
RT   Cryptosporidium parvum.";
RL   J. Eukaryot. Microbiol. 46:50S-51S(1999).
RN   [2]
RP   SEQUENCE FROM N.A.
RA   Liu C., Abrahamsen M.S.;
RL   Submitted (JAN-2000) to the EMBL/GenBank/DDBJ databases.
CC   -!- SUBCELLULAR LOCATION: NUCLEAR (BY SIMILARITY).
CC   -!- SIMILARITY: CONTAINS 1 MYB-LIKE DOMAIN.
DR   EMBL; AF220540; AAF24519.1; -.
DR   HSSP; P54274; 1BA5.
DR   InterPro; IPR001005; Myb_DNA_binding.
DR   Pfam; PF00249; myb_DNA-binding; 1.
DR   SMART; SM00717; SANT; 1.
DR   PROSITE; PS50090; MYB_3; 1.
KW   DNA-binding; Nuclear protein.
SQ   SEQUENCE   649 AA;  73953 MW;  1A6A9B8F6F79B582 CRC64;

  Query Match             71.9%;  Score 41;  DB 5;  Length 649;
  Best Local Similarity   60.0%;  Pred. No. 28;
  Matches    6;  Conservative    2;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||: :|:|| |
Db        156 KWIYKLFHNK 165


RESULT 9
Q22528
ID   Q22528      PRELIMINARY;      PRT;  1142 AA.
AC   Q22528;
DT   01-NOV-1996 (TrEMBLrel. 01, Created)
DT   01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT   01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE   T16G12.5 protein.
GN   T16G12.5.
OS   Caenorhabditis elegans.
OC   Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Rhabditoidea;
OC   Rhabditidae; Peloderinae; Caenorhabditis.
OX   NCBI_TaxID=6239;
RN   [1]
RP   SEQUENCE FROM N.A.
RA   Thomas K.;
RL   Submitted (MAR-1994) to the EMBL/GenBank/DDBJ databases.
RN   [2]
RP   SEQUENCE FROM N.A.
```

```
RX   MEDLINE=99069613; PubMed=9851916;
RA   none;
RT   "Genome sequence of the nematode C.elegans: A platform for
RT   investigating biology.";
RL   Science 282:2012-2018(1998).
DR   EMBL; Z30317; CAA82968.2; -.
DR   WormPep; T16G12.5; CE23986.
SQ   SEQUENCE   1142 AA;  131363 MW;  298CDF6B4FD02733 CRC64;

  Query Match             71.9%;  Score 41;  DB 5;  Length 1142;
  Best Local Similarity   77.8%;  Pred. No. 46;
  Matches    7;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHK 9
              ||| |:|||
Db       1043 KWLGQVFHK 1051


RESULT 10
Q9GK39
ID   Q9GK39      PRELIMINARY;      PRT;   179 AA.
AC   Q9GK39;
DT   01-MAR-2001 (TrEMBLrel. 16, Created)
DT   01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT   01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE   Bactericidal/permeability-increasing protein (Fragment).
OS   Macaca mulatta (Rhesus macaque).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
OC   Cercopithecinae; Macaca.
OX   NCBI_TaxID=9544;
RN   [1]
RP   SEQUENCE FROM N.A.
RA   Xu J., Wang H.;
RT   "Cloning of cDNA of rhesus monkey bactericidal/permeability-increasing
RT   protein amino-terminal fragment.";
RL   Submitted (NOV-2000) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; AF322587; AAG42843.1; -.
DR   HSSP; P17213; 1BP1.
DR   InterPro; IPR001124; LBP_BPI_CETP.
DR   Pfam; PF01273; LBP_BPI_CETP; 1.
DR   SMART; SM00328; BPI1; 1.
FT   NON_TER       1      1
FT   NON_TER     179    179
SQ   SEQUENCE   179 AA;  19772 MW;  F1B180A02A38CE63 CRC64;

  Query Match             70.2%;  Score 40;  DB 6;  Length 179;
  Best Local Similarity   77.8%;  Pred. No. 13;
  Matches    7;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          2 WLIQLFHKK 10
              |:|:|| :|
Db        143 WLIRLFRKK 151


RESULT 11
Q81875
ID   Q81875      PRELIMINARY;      PRT;   290 AA.
AC   Q81875;
DT   01-NOV-1996 (TrEMBLrel. 01, Created)
DT   01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT   01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE   RNA-directed RNA polymerase (Fragment).
OS   Hepatitis E virus.
OC   Viruses; ssRNA positive-strand viruses, no DNA stage;
OC   Hepatitis E-like viruses.
OX   NCBI_TaxID=12461;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=92024067; PubMed=1926770;
RA   Tam A.W., Smith M.M., Guerra M.E., Huang C.-C., Bradley D.W.,
RA   Fry K.E., Reyes G.R.;
RT   "Hepatitis E virus (HEV): molecular cloning and sequencing of the
RT   full-length viral genome.";
RL   Virology 185:120-131(1991).
RN   [2]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=92261377; PubMed=1584074;
RA   Uchida T., Suzuki K., Hayashi N., Iida F., Hara T., Oo S.S.,
RA   Wang C.-K., Shikata T., Ichikawa M., Rikihisa T., Mizuno K., Win K.M.;
RT   "Hepatitis E virus: cDNA cloning and expression.";
RL   Microbiol. Immunol. 36:67-79(1992).
RN   [3]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=92335008; PubMed=1630924;
RA   Aye T.T., Uchida T., Ma X.Z., Iida F., Shikata T., Zhuang H.,
RA   Win K.M.;
RT   "Complete nucleotide sequence of a hepatitis E virus isolated from the
RT   Xinjiang epidemic (1986-1988) of China.";
RL   Nucleic Acids Res. 20:3512-3512(1992).
RN   [4]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=92115700; PubMed=1731327;
RA   Tsarev S.A., Emerson S.U., Reyes G.R., Tsareva T.S., Legters L.J.,
RA   Malik I.A., Iqbal M., Purcell R.H.;
RT   "Characterization of a prototype strain of hepatitis E virus.";
RL   Proc. Natl. Acad. Sci. U.S.A. 89:559-563(1992).
RN   [5]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=93079857; PubMed=1448913;
RA   Huang C.-C., Nguyen D., Fernandez J., Yun K.Y., Fry K.E., Bradley D.W.,
RA   Tam A.W., Reyes G.R.;
RT   "Molecular cloning and sequencing of the Mexico isolate of Hepatitis E
RT   virus (HEV).";
RL   Virology 191:550-558(1992).
RN   [6]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=92271462; PubMed=1589964;
RA   Fry K.E., Tam A.W., Smith M.W., Kim J.P., Luk K.-C., Young L.M.,
RA   Piatak M., Feldman R.A., Yun K.Y., Purdy M.A., McCaustland K.A.,
RA   Bradley D.W., Reyes G.R.;
RT   "Hepatitis E virus (HEV): Strain variation in the nonstructural gene
RT   region encoding consensus motifs for an RNA-dependent RNA polymerase
RT   and an ATP/GTP binding site.";
RL   Virus Genes 6:173-185(1992).
RN   [7]
RP   SEQUENCE FROM N.A.
RA   Sheng-Li B., Purdy M.A., McCaustland K.A., Margolis H.S.,
RA   Bradley D.W.;
RT   "The sequence of Hepatitis E virus isolated directly from a single
RT   source during an outbreak in China.";
RL   Virus Res. 0:0-0(1993).
DR   EMBL; L10337; AAA45733.1; -.
DR   InterPro; IPR001788; RNA_dep_RNApol2.
DR   InterPro; IPR007095; RNA_pol_DS_PS.
DR   InterPro; IPR007094; RNA_pol_PSvir.
DR   Pfam; PF00978; RNA_dep_RNApol2; 1.
DR   PROSITE; PS50507; RDRP_POSITIVE; 1.
DR   PROSITE; PS50521; RDRP_VIRAL; 1.
KW   RNA-directed RNA polymerase.
FT   NON_TER       1      1
FT   NON_TER     290    290
SQ   SEQUENCE   290 AA;  31895 MW;  70105D1C1741A3AB CRC64;

  Query Match             70.2%;  Score 40;  DB 12;  Length 290;
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  Matches    6;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFH 8
              ||||:|:|
Db        149 KWLIRLYH 156


RESULT 12
Q8IDH8
ID   Q8IDH8      PRELIMINARY;      PRT;   464 AA.
```

```
AC   Q8IDH8;
DT   01-MAR-2003 (TrEMBLrel. 23, Created)
DT   01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
DT   01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE   Hypothetical protein.
GN   MAL13P1.264.
OS   Plasmodium falciparum (isolate 3D7).
OC   Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
OX   NCBI_TaxID=36329;
RN   [1]
RP   SEQUENCE FROM N.A.
RA   Harris B., Lennard N., Clark L., Line A., Barron A., Corton C.,
RA   Berriman M., Pain A., Hall N., Atkin R., Chillingworth C., Doggett J.,
RA   Ormond D., Sanders M., Hayes R., Hall S., Quail M., Barrell B.;
RL   Submitted (SEP-2002) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; AL844509; CAD52643.1; -.
KW   Hypothetical protein.
SQ   SEQUENCE   464 AA;  55268 MW;  42F8284C42DB5776 CRC64;

  Query Match             70.2%;  Score 40;  DB 5;  Length 464;
  Best Local Similarity   66.7%;  Pred. No. 31;
  Matches    6;  Conservative    2;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          2 WLIQLFHKK 10
              : |:|: ||
Db        306 WSIELYHKK 314


RESULT 13
Q9ERU9
ID   Q9ERU9      PRELIMINARY;      PRT;  3053 AA.
AC   Q9ERU9;
DT   01-MAR-2001 (TrEMBLrel. 16, Created)
DT   01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT   01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE   Ran-binding protein 2.
GN   RANBP2.
OS   Mus musculus (Mouse).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX   NCBI_TaxID=10090;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   STRAIN=129/Ola;
RX   MEDLINE=21251165; PubMed=11353387;
RA   Fauser S., Aslanukov A., Roepman R., Ferreira P.A.;
RT   "Genomic organization, expression, and localization of murine Ran-
RT   binding protein 2 (RanBP2) gene.";
RL   Mamm. Genome 12:406-415(2001).
CC   -!- SIMILARITY: CONTAINS 1 CYCLOPHILIN-LIKE PPIASE DOMAIN.
DR   EMBL; AF279458; AAG17403.1; -.
DR   HSSP; P49792; 1RRP.
DR   MGD; MGI:894323; Ranbp2.
DR   InterPro; IPR002130; CSA_PPIase.
DR   InterPro; IPR000697; EVH1.
DR   InterPro; IPR000156; Ran_BP1.
DR   InterPro; IPR001440; TPR.
DR   InterPro; IPR001876; Znf_RanGDP.
DR   Pfam; PF00160; pro_isomerase; 1.
DR   Pfam; PF00638; Ran_BP1; 4.
DR   Pfam; PF00515; TPR; 1.
DR   Pfam; PF00641; zf-RanBP; 6.
DR   PRINTS; PR00153; CSAPPISMRASE.
DR   SMART; SM00160; RanBD; 4.
DR   SMART; SM00547; ZnF_RBZ; 6.
DR   PROSITE; PS00170; CSA_PPIASE_1; 1.
DR   PROSITE; PS50072; CSA_PPIASE_2; 1.
DR   PROSITE; PS50196; RANBD1; 4.
DR   PROSITE; PS01358; ZF_RANBP2_1; 6.
DR   PROSITE; PS50199; ZF_RANBP2_2; 4.
KW   Isomerase; Rotamase.
SQ   SEQUENCE   3053 AA;  341087 MW;  685DF8526444D7BE CRC64;

  Query Match             70.2%;  Score 40;  DB 11;  Length 3053;
  Best Local Similarity   87.5%;  Pred. No. 1.7e+02;
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Qy          1 KWLIQLFH 8
              ||| |||| 
Db        455 KWLKQLFH 462


RESULT 14
Q9SPN0
ID   Q9SPN0      PRELIMINARY;      PRT;  567 AA.
AC   Q9SPN0;
DT   01-MAY-2000 (TrEMBLrel. 13, Created)
DT   01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT   01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
DE   (3R)-linalool synthase (Fragment).
GN   QH1.
OS   Artemisia annua (Sweet wormwood).
OC   Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC   Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
OC   Asteridae; campanulids; Asterales; Asteraceae; Asteroideae;
OC   Anthemideae; Artemisia.
OX   NCBI_TaxID=35608;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=20031460; PubMed=10562427;
RA   Jia J.W., Crock J., Lu S., Croteau R., Chen X.Y.;
RT   "(3R)-Linalool synthase from Artemisia annua L.: cDNA isolation,
RT   characterization, and wound induction.";
RL   Arch. Biochem. Biophys. 372:143-149(1999).
DR   EMBL; AF154125; AAF13357.1; -.
DR   HSSP; Q40577; 5EAU.
DR   InterPro; IPR005630; Terpene_synth_C.
DR   InterPro; IPR001906; Terp_synth-like.
DR   Pfam; PF01397; Terpene_synth; 1.
DR   Pfam; PF03936; Terpene_synth_C; 1.
FT   NON_TER       1       1
SQ   SEQUENCE   567 AA;  65700 MW;  49D1985524EB2B5F CRC64;

  Query Match             68.4%;  Score 39;  DB 10;  Length 567;
  Best Local Similarity   60.0%;  Pred. No. 57;
  Matches    6;  Conservative    2;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              || |:|: ||
Db        227 KWFIELYEKK 236


RESULT 15
Q8S2M2
ID   Q8S2M2      PRELIMINARY;      PRT;  683 AA.
AC   Q8S2M2;
DT   01-JUN-2002 (TrEMBLrel. 21, Created)
DT   01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DT   01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
DE   Far-red impaired response protein-like.
GN   OSJNBA0090K04.10 OR P0704D04.18.
OS   Oryza sativa (japonica cultivar-group).
OC   Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC   Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
OC   Ehrhartoideae; Oryzeae; Oryza.
OX   NCBI_TaxID=39947;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   STRAIN=cv. Nipponbare;
RA   Sasaki T., Matsumoto T., Yamamoto K.;
RT   "Oryza sativa nipponbare(GA3) genomic DNA, chromosome 1, BAC
RT   clone:OSJNBa0090K04.";
RL   Submitted (FEB-2001) to the EMBL/GenBank/DDBJ databases.
RN   [2]
RP   SEQUENCE FROM N.A.
RC   STRAIN=cv. Nipponbare;
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RA   Sasaki T., Matsumoto T., Yamamoto K.;
RT   "Oryza sativa nipponbare(GA3) genomic DNA, chromosome 1, PAC
RT   clone:P0704D04.";
RL   Submitted (FEB-2001) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; AP003216; BAB84834.1; -.
DR   EMBL; AP003303; BAB92478.1; -.
DR   Gramene; Q8S2M2; -.
DR   InterPro; IPR004330; PAR1.
DR   Pfam; PF03101; PAR1; 1.
SQ   SEQUENCE   683 AA;  77996 MW;  F19031DC42D0F92C CRC64;

  Query Match             66.7%;  Score 38;  DB 10;  Length 683;
  Best Local Similarity   70.0%;  Pred. No. 1e+02;
  Matches    7;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

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              ||| :.: ||
Db        445 KWLERLFQKK 454


Search completed: October 1, 2003, 09:08:14
Job time : 37 secs
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GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: October 1, 2003, 09:42:03 ; Search time 70 Seconds
(without alignments)
22.675 Million cell updates/sec

Title: US-09-881-490-126
Perfect score: 57
Sequence: 1 KWLIQLFHKK 10

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1107863 seqs, 158726573 residues

Total number of hits satisfying chosen parameters: 117

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 100%
Maximum Match 100%
Listing first 1000 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	57	100.0	10	17	AAW04008	Antifungal peptide
2	57	100.0	10	18	AAY15925	Bacterial/permeabi
3	57	100.0	10	18	AAW44593	Anti-fungal peptid
4	57	100.0	10	18	AAW44594	Anti-fungal peptid
5	57	100.0	10	18	AAW44595	Anti-fungal peptid
6	57	100.0	10	18	AAW44596	Anti-fungal peptid
7	57	100.0	10	18	AAW43771	Bactericidal/perme
8	57	100.0	10	18	AAW43715	Bactericidal/perme
9	57	100.0	10	18	AAW44649	Anti-fungal peptid
10	57	100.0	10	18	AAW44525	Anti-fungal peptid
11	57	100.0	10	18	AAW44603	Anti-fungal peptid
12	57	100.0	10	18	AAW44644	Anti-fungal peptid
13	57	100.0	10	18	AAW44645	Anti-fungal peptid
14	57	100.0	10	18	AAW44646	Anti-fungal peptid
15	57	100.0	10	18	AAW44643	Anti-fungal peptid
16	57	100.0	10	20	AAY00570	Antifungal peptide
17	57	100.0	10	20	AAY00571	Antifungal peptide
18	57	100.0	10	20	AAY00572	Antifungal peptide
19	57	100.0	10	20	AAY00573	Antifungal peptide
20	57	100.0	10	20	AAY00580	Antifungal peptide
21	57	100.0	10	20	AAY00502	Antifungal peptide
22	57	100.0	10	20	AAY00620	Antifungal peptide
23	57	100.0	10	20	AAY00621	Antifungal peptide
24	57	100.0	10	20	AAY00622	Antifungal peptide
25	57	100.0	10	20	AAY00623	Antifungal peptide
26	57	100.0	10	20	AAY00626	Antifungal peptide
27	57	100.0	10	22	AAB31779	Bactericidal/perme
28	57	100.0	10	22	AAB31781	Bactericidal/perme
29	57	100.0	10	22	AAB61892	Human BPI protein
30	57	100.0	10	22	AAB61894	Human BPI protein
31	57	100.0	10	22	AAB61914	Human BPI protein
32	57	100.0	10	22	AAB61916	Human BPI protein
33	57	100.0	10	22	AAB61919	Human BPI protein
34	57	100.0	10	22	AAB61921	Human BPI protein
35	57	100.0	10	22	AAB68701	Peptide-based cons
36	57	100.0	10	22	AAB68702	Peptide-based cons
37	57	100.0	10	22	AAB68703	Peptide-based cons
38	57	100.0	10	22	AAB68711	Peptide-based cons
39	57	100.0	10	22	AAB68712	Peptide-based cons
40	57	100.0	10	22	AAB68713	Peptide-based cons
41	57	100.0	10	22	AAB68714	Peptide-based cons
42	57	100.0	10	22	AAB68715	Peptide-based cons
43	57	100.0	10	22	AAB68716	Peptide-based cons
44	57	100.0	10	22	AAB68717	Peptide-based cons
45	57	100.0	10	22	AAB68718	Peptide-based cons
46	57	100.0	10	22	AAB68719	Peptide-based cons
47	57	100.0	10	22	AAB68720	Peptide-based cons
48	57	100.0	10	22	AAB68721	Peptide-based cons
49	57	100.0	10	22	AAB68722	Peptide-based cons
50	57	100.0	10	22	AAB68723	Peptide-based cons
51	57	100.0	10	22	AAB68724	Peptide-based cons
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54	57	100.0	10	22	AAB68727	Peptide-based cons
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59	57	100.0	10	22	AAB68732	Peptide-based cons
60	57	100.0	10	22	AAB68733	Peptide-based cons
61	57	100.0	10	22	AAB68735	Peptide-based cons
62	57	100.0	10	22	AAB68736	Peptide-based cons
63	57	100.0	10	22	AAB68737	Peptide-based cons
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66	57	100.0	10	22	AAB68740	Peptide-based cons
67	57	100.0	10	22	AAB68741	Peptide-based cons
68	57	100.0	10	22	AAB68743	Peptide-based cons
69	57	100.0	10	22	AAB68748	Peptide-based cons
70	57	100.0	10	22	AAB68749	Peptide-based cons
71	57	100.0	10	22	AAB65426	Anti-fungal peptid
72	57	100.0	10	22	AAB65494	Anti-fungal peptid
73	57	100.0	10	22	AAB65495	Anti-fungal peptid
74	57	100.0	10	22	AAB65496	Anti-fungal peptid
75	57	100.0	10	22	AAB65497	Anti-fungal peptid
76	57	100.0	10	22	AAB65504	Anti-fungal peptid
77	57	100.0	10	22	AAB65544	Anti-fungal peptid
78	57	100.0	10	22	AAB65545	Anti-fungal peptid
79	57	100.0	10	22	AAB65546	Anti-fungal peptid
80	57	100.0	10	22	AAB65547	Anti-fungal peptid
81	57	100.0	10	22	AAB65550	Anti-fungal peptid
82	57	100.0	10	23	AAE26312	Human rBPI protein

83	57	100.0	11	17	AAW04043	Antifungal peptide
84	57	100.0	11	17	AAW04004	Antifungal peptide
85	57	100.0	11	18	AAW44582	Anti-fungal peptid
86	57	100.0	11	18	AAW43764	Bactericidal/perme
87	57	100.0	11	18	AAW43711	Bactericidal/perme
88	57	100.0	11	18	AAW44521	Anti-fungal peptid
89	57	100.0	11	20	AAY00559	Antifungal peptide
90	57	100.0	11	20	AAY00498	Antifungal peptide
91	57	100.0	11	22	AAB65422	Anti-fungal peptid
92	57	100.0	11	22	AAB65483	Anti-fungal peptid
93	57	100.0	12	17	AAW04001	Antifungal peptide
94	57	100.0	12	18	AAW43708	Bactericidal/perme
95	57	100.0	12	18	AAW44518	Anti-fungal peptid
96	57	100.0	12	20	AAY00495	Antifungal peptide
97	57	100.0	12	22	AAB65419	Anti-fungal peptid
98	57	100.0	13	17	AAW04053	Antifungal peptide
99	57	100.0	13	18	AAW43706	Bactericidal/perme
100	57	100.0	13	18	AAW44516	Anti-fungal peptid
101	57	100.0	13	20	AAY00493	Antifungal peptide
102	57	100.0	13	22	AAB65417	Anti-fungal peptid
103	57	100.0	14	15	AAR62100	BPI derived peptid
104	57	100.0	14	16	AAR78006	BPI protein segmen
105	57	100.0	14	16	AAR81070	BPI.97, domain III
106	57	100.0	14	16	AAR81083	Anti-fungal BPI pe
107	57	100.0	14	16	AAR86546	BPI.97 for use in
108	57	100.0	14	16	AAR76333	Bacterial permeabi
109	57	100.0	14	17	AAW05943	Recombinant BPI pe
110	57	100.0	14	17	AAW04091	Antifungal peptide
111	57	100.0	14	18	AAW43642	Bactericidal/perme
112	57	100.0	14	18	AAW44430	Anti-fungal peptid
113	57	100.0	14	19	AAW63394	Human BPI protein
114	57	100.0	14	20	AAY00407	Antifungal peptide
115	57	100.0	14	21	AAB16132	Bactericidal/perme
116	57	100.0	14	22	AAB65331	Anti-fungal peptid
117	57	100.0	14	22	AAB52302	Peptide BPI 97. U

ALIGNMENTS

RESULT 1
AAW04008
ID AAW04008 standard; peptide; 10 AA.
XX
AC AAW04008;
XX
DT 04-NOV-1996 (first entry)
XX
DE Antifungal peptide XMP.293/XMP.363/XMP.364/XMP.365/XMP.366/XMP.373.
XX
KW Antifungal peptide; inhibitor; Domain III; polymorphonuclear leukocyte;
KW bactericidal/permeability-increasing protein; BPI; mammalian; PMN; fungi;
KW neutrophil; replication inhibitor; fungal infection; Aspergillus;
KW Cryptococcus; Candida; C.albicans; C.galabrat; C.krusei; C.lusitaniae;
KW C.parapsilosis; C.tropicalis; therapy.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 1
FT /note= "optionally acetylated"
FT Misc-difference 1..10
FT /note= "optionally D-form residues"
FT Modified-site 10
FT /note= "amidated"
XX
PN WO9608509-A1.
XX
PD 21-MAR-1996.
XX
PF 20-JUL-1995; 95WO-US09262.
XX
PR 13-JAN-1995; 95US-0372105.

Appl

PR 15-SEP-1994; 94US-0306473.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1996-179900/18.
XX
PT Antifungal peptide(s) derived from Domain III of BPI protein - used
PT in vitro for killing or inhibiting replication of fungi, esp.
PT Candida species
XX
PS Claim 5; Page 141; 199pp; English.
XX
CC AAW04000-W04160 represent antifungal peptides. These sequences are
CC based on (or derived from) Domain III of the
CC bactericidal/permeability-increasing protein (BPI). BPI is a protein
CC that can be isolated from the granules of mammalian polymorphonuclear
CC leukocytes (PMNs or neutrophils). These antifungal peptides can be used
CC for killing, or inhibiting replication of, fungi in vitro. These
CC sequences can also be used for treatment of a fungal infection involving
CC fungi from the species Candida, Aspergillus and Cryptococcus. The
CC sequences are especially useful for treating C.albicans, C.galabrat,
CC C.krusei, C.lusitaniae, C.parapsilosis and C.tropicalis infections.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 17; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 2
AAY15925
ID AAY15925 standard; peptide; 10 AA.
XX
AC AAY15925;
XX
DT 02-AUG-1999 (first entry)
XX
DE Bacterial/permeability increasing protein (BPI) fragment.
XX
KW Backbone cyclised peptide analogue; peptidomimetic; N-alpha derivative;
KW bridging group; screening; bradykinin; Substance P; BPI; somatostatin;
KW interleukin-6 inhibitory peptide; analogue; cyclic.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 10
FT /note= "amidated"
XX
PN WO9709344-A2.
XX
PD 13-MAR-1997.
XX
PF 28-AUG-1996; 96WO-IL00091.
XX
PR 07-DEC-1995; 95US-0569042.
PR 29-AUG-1995; 95IL-0115096.
XX
PA (PEPT-) PEPTOR LTD.
PA (YISS) YISSUM RES & DEV CO.
XX
PI Gilon C, Hornik V;
XX
DR WPI; 1997-192838/17.
XX
PT Libraries of backbone-cyclised peptide analogues - are formed using

bad date

PT bridging peptide sequence attached via the alpha-nitrogens of amino
PT acid derivs. to provide new non-peptide linkages
XX
PS Example 11; Page 48; 106pp; English.
XX
CC The specification describes a library of chemical compounds which
CC consists of a number of backbone-cyclised peptide analogues. Each
CC compound is composed of a peptide sequence having at least one
CC building unit comprising an N-alpha derivative of an amino acid. At
CC least one backbone nitrogen in each peptide sequence is linked to a
CC side chain of at least one other amino acid in the peptide sequence
CC or to at least one other backbone nitrogen in the peptide sequence
CC by a bridging group (comprising a disulphide, amide, thioether,
CC thioester, imine, ether or alkene bridge) to form a backbone-cyclised
CC peptide analogue. The libraries may be used for screening for
CC biologically active compounds, e.g. bradykinin agonists or antagonists,
CC Substance P analogues, BPI analogues, somatostatin agonists or
CC antagonists or interleukin-6 inhibitory peptide analogues.
CC The present sequence represents a fragment of Bacterial/permeability
CC increasing protein (BPI), which was used as a basis for producing
CC backbone-cyclic peptide libraries of the invention.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 18; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 3
AAW44593
ID AAW44593 standard; peptide; 10 AA.
XX
AC AAW44593;
XX
DT 27-APR-1998 (first entry)
XX
DE Anti-fungal peptide #194 based on BPI protein (residues 142-169).
XX
KW Anti-fungal peptide; bactericidal-permeability-increasing protein; BPI;
KW polymorphonuclear leukocyte; fungicide.
XX
OS Synthetic.
OS Mammalia.
XX
FH Key Location/Qualifiers
FT Misc-difference 1
FT /note= "D-form residue"
FT Misc-difference 2
FT /note= "D-form residue"
FT Misc-difference 9
FT /note= "D-form residue"
FT Modified-site 10
FT /note= "C-terminal amide, D-form residue"
XX
PN WO9704008-A1.
XX
PD 06-FEB-1997.
XX
PF 21-MAR-1996; 96WO-US03845.
XX
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1997-132578/12.
XX
PT Anti-fungal peptide(s) derived from or based on domain III of
PT bactericidal-permeability-increasing protein - are used in vitro or
PT in vivo as a fungicides
XX
PS Claim 1; Page 205; 230pp; English.
XX
CC This is a specifically claimed anti-fungal peptide which is based on
CC domain III (amino acids 142-160) of bactericidal-permeability-increasing
CC protein (BPI), isolated from the granules of mammalian polymorphonuclear
CC leukocytes. It is used in compositions with diluents, carriers or
CC adjuvants to treat fungal infections in patients. It may also be used in
CC vitro to kill or inhibit the replication of fungi, such as in
CC decontaminating fluids and sterilising medical and implant devices.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 18; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 4
AAW44594
ID AAW44594 standard; peptide; 10 AA.
XX
AC AAW44594;
XX
DT 27-APR-1998 (first entry)
XX
DE Anti-fungal peptide #195 based on BPI protein (residues 142-169).
XX
KW Anti-fungal peptide; bactericidal-permeability-increasing protein; BPI;
KW polymorphonuclear leukocyte; fungicide.
XX
OS Synthetic.
OS Mammalia.
XX
FH Key Location/Qualifiers
FT Modified-site 1
FT /note= "N-terminal acetyl, D-form residue"
FT Misc-difference 2
FT /note= "D-form residue"
FT Misc-difference 9
FT /note= "D-form residue"
FT Modified-site 10
FT /note= "C-terminal amide, D-form residue"
XX
PN WO9704008-A1.
XX
PD 06-FEB-1997.
XX
PF 21-MAR-1996; 96WO-US03845.
XX
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1997-132578/12.
XX
PT Anti-fungal peptide(s) derived from or based on domain III of
PT bactericidal-permeability-increasing protein - are used in vitro or
PT in vivo as a fungicides
XX
PS Claim 1; Page 206; 230pp; English.
XX
CC This is a specifically claimed anti-fungal peptide which is based on
CC domain III (amino acids 142-160) of bactericidal-permeability-increasing

```
CC   protein (BPI), isolated from the granules of mammalian polymorphonuclear
CC   leukocytes. It is used in compositions with diluents, carriers or
CC   adjuvants to treat fungal infections in patients. It may also be used in
CC   vitro to kill or inhibit the replication or fungi, such as in
CC   decontaminating fluids and sterilising medical and implant devices.
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 18;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 5
AAW44595
ID   AAW44595 standard; peptide; 10 AA.
XX
AC   AAW44595;
XX
DT   27-APR-1998  (first entry)
XX
DE   Anti-fungal peptide #196 based on BPI protein (residues 142-169).
XX
KW   Anti-fungal peptide; bactericidal-permeability-increasing protein; BPI;
KW   polymorphonuclear leukocyte; fungicide.
XX
OS   Synthetic.
OS   Mammalia.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1..10
FT                   /note= "D-form residues"
FT   Modified-site   10
FT                   /note= "C-terminal amide, D-form residue"
XX
PN   WO9704008-A1.
XX
PD   06-FEB-1997.
XX
PF   21-MAR-1996;   96WO-US03845.
XX
PR   20-JUL-1995;   95US-0504841.
XX
PA   (XOMA ) XOMA CORP.
XX
PI   Fadem MB,  Lim E,  Little RG;
XX
DR   WPI; 1997-132578/12.
XX
PT   Anti-fungal peptide(s) derived from or based on domain III of
PT   bactericidal-permeability-increasing protein - are used in vitro or
PT   in vivo as a fungicides
XX
PS   Claim 1; Page 207; 230pp; English.
XX
CC   This is a specifically claimed anti-fungal peptide which is based on
CC   domain III (amino acids 142-160) of bactericidal-permeability-increasing
CC   protein (BPI), isolated from the granules of mammalian polymorphonuclear
CC   leukocytes. It is used in compositions with diluents, carriers or
CC   adjuvants to treat fungal infections in patients. It may also be used in
CC   vitro to kill or inhibit the replication of fungi, such as in
CC   decontaminating fluids and sterilising medical and implant devices.
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 18;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||| ||||
Db          1 KWLIQLFHKK 10


RESULT 6
AAW44596
ID   AAW44596 standard; peptide; 10 AA.
XX
AC   AAW44596;
XX
DT   27-APR-1998  (first entry)
XX
DE   Anti-fungal peptide #197 based on BPI protein (residues 142-169).
XX
KW   Anti-fungal peptide; bactericidal-permeability-increasing protein; BPI;
KW   polymorphonuclear leukocyte; fungicide.
XX
OS   Synthetic.
OS   Mammalia.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "N-terminal acetyl"
FT   Misc-difference 1..10
FT                   /note= "D-form residues"
FT   Modified-site   10
FT                   /note= "C-terminal amide"
XX
PN   WO9704008-A1.
XX
PD   06-FEB-1997.
XX
PF   21-MAR-1996;   96WO-US03845.
XX
PR   20-JUL-1995;   95US-0504841.
XX
PA   (XOMA ) XOMA CORP.
XX
PI   Fadem MB,  Lim E,  Little RG;
XX
DR   WPI; 1997-132578/12.
XX
PT   Anti-fungal peptide(s) derived from or based on domain III of
PT   bactericidal-permeability-increasing protein - are used in vitro or
PT   in vivo as a fungicides
XX
PS   Claim 1; Page 207; 230pp; English.
XX
CC   This is a specifically claimed anti-fungal peptide which is based on
CC   domain III (amino acids 142-160) of bactericidal-permeability-increasing
CC   protein (BPI), isolated from the granules of mammalian polymorphonuclear
CC   leukocytes. It is used in compositions with diluents, carriers or
CC   adjuvants to treat fungal infections in patients. It may also be used in
CC   vitro to kill or inhibit the replication of fungi, such as in
CC   decontaminating fluids and sterilising medical and implant devices.
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 18;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 7
AAW43771
ID   AAW43771 standard; peptide; 10 AA.
XX
AC   AAW43771;
```

XX
DT 20-APR-1998 (first entry)
XX
DE Bactericidal/permeability increasing peptide XMP.373.
XX
KW Bactericidal/permeability increasing peptide; BPI; fusion protein;
KW bacterial infection; fungal infection; endotoxin; heparin;
KW angiogenesis; fungicidal; recombinant DNA; vector.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 1
FT /note= "Acetylated"
FT Modified-site 10
FT /note= "Amidated"
XX
PN WO9735009-A1.
XX
PD 25-SEP-1997.
XX
PF 18-MAR-1997; 97WO-US05287.
XX
PR 22-MAR-1996; 96US-0621803.
XX
PA (XOMA) XOMA CORP.
XX
PI Better MD;
XX
DR WPI; 1997-480215/44.
XX
PT Recombinant production of bactericidal/permeability increasing
PT protein - by expression as a fusion protein in microbial host cells,
PT then cleaving the BPI peptide from the carrier
XX
PS Claim 10; Page 134; 186pp; English.
XX
CC A new recombinant DNA vector construct has been developed which encodes
CC a fusion protein and is suitable for introduction into a bacterial host.
CC The vector comprises: (a) DNA encoding at least one cationic
CC bactericidal/permeability increasing peptide (BPI), (b) DNA encoding a
CC carrier protein, and (c) DNA encoding an amino acid (aa) cleavage site
CC located between (a) and (b). The present sequence represents a
CC specifically claimed BPI peptide. The peptides have many uses including
CC the treatment of bacterial and fungal infections. BPI peptides also
CC bind to endotoxins and heparin, neutralising their effects. The
CC peptides have further been shown to inhibit angiogenesis (partly due to
CC heparin-binding activity). The fusion proteins have been found to be
CC expressed in large amounts without significant proteolysis, and in some
CC cases are actually secreted from the host cells. This allows the
CC indirect production of anti-microbial BPI peptides in microbial hosts.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 18; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 8
AAW43715
ID AAW43715 standard; peptide; 10 AA.
XX
AC AAW43715;
XX
DT 20-APR-1998 (first entry)
XX
DE Bactericidal/permeability increasing peptide XMP.293.
XX
KW Bactericidal/permeability increasing peptide; BPI; fusion protein;
KW bacterial infection; fungal infection; endotoxin; heparin;
KW angiogenesis; fungicidal; recombinant DNA; vector.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 10
FT /note= "Amidated"
XX
PN WO9735009-A1.
XX
PD 25-SEP-1997.
XX
PF 18-MAR-1997; 97WO-US05287.
XX
PR 22-MAR-1996; 96US-0621803.
XX
PA (XOMA) XOMA CORP.
XX
PI Better MD;
XX
DR WPI; 1997-480215/44.
XX
PT Recombinant production of bactericidal/permeability increasing
PT protein - by expression as a fusion protein in microbial host cells,
PT then cleaving the BPI peptide from the carrier
XX
PS Claim 10; Page 113; 186pp; English.
XX
CC A new recombinant DNA vector construct has been developed which encodes
CC a fusion protein and is suitable for introduction into a bacterial host.
CC The vector comprises: (a) DNA encoding at least one cationic
CC bactericidal/permeability increasing peptide (BPI), (b) DNA encoding a
CC carrier protein, and (c) DNA encoding an amino acid (aa) cleavage site
CC located between (a) and (b). The present sequence represents a
CC specifically claimed BPI peptide. The peptides have many uses including
CC the treatment of bacterial and fungal infections. BPI peptides also
CC bind to endotoxins and heparin, neutralising their effects. The
CC peptides have further been shown to inhibit angiogenesis (partly due to
CC heparin-binding activity). The fusion proteins have been found to be
CC expressed in large amounts without significant proteolysis, and in some
CC cases are actually secreted from the host cells. This allows the
CC indirect production of anti-microbial BPI peptides in microbial hosts.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 18; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 9
AAW44649
ID AAW44649 standard; peptide; 10 AA.
XX
AC AAW44649;
XX
DT 27-APR-1998 (first entry)
XX
DE Anti-fungal peptide #250 based on BPI protein (residues 142-169).
XX
KW Anti-fungal peptide; bactericidal-permeability-increasing protein; BPI;
KW polymorphonuclear leukocyte; fungicide.
XX
OS Synthetic.
OS Mammalia.

XX
FH Key Location/Qualifiers
FT Modified-site 1
FT /note= "N-terminus is protected by 1-fluorenylmethyl-
FT oxycarbonyl (Fmoc)"
FT Modified-site 10
FT /note= "C-terminal amide"
XX
PN WO9704008-A1.
XX
PD 06-FEB-1997.
XX
PF 21-MAR-1996; 96WO-US03845.
XX
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1997-132578/12.
XX
PT Anti-fungal peptide(s) derived from or based on domain III of
PT bactericidal-permeability-increasing protein - are used in vitro or
PT in vivo as a fungicides
XX
PS Claim 1; -pp; 230pp; English.
XX
CC This is a specifically claimed anti-fungal peptide which is based on
CC domain III (amino acids 142-160) of bactericidal-permeability-increasing
CC protein (BPI), isolated from the granules of mammalian polymorphonuclear
CC leukocytes. It is used in compositions with diluents, carriers or
CC adjuvants to treat fungal infections in patients. It may also be used in
CC vitro to kill or inhibit the replication of fungi, such as in
CC decontaminating fluids and sterilising medical and implant devices.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 18; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
|| |||||||
Db 1 KWLIQLFHKK 10

RESULT 10
AAW44525
ID AAW44525 standard; peptide; 10 AA.
XX
AC AAW44525;
XX
DT 27-APR-1998 (first entry)
XX
DE Anti-fungal peptide #126 based on BPI protein (residues 142-169).
XX
KW Anti-fungal peptide; bactericidal-permeability-increasing protein; BPI;
KW polymorphonuclear leukocyte; fungicide.
XX
OS Synthetic.
OS Mammalia.
XX
FH Key Location/Qualifiers
FT Modified-site 10
FT /note= "C-terminal amide"
XX
PN WO9704008-A1.
XX
PD 06-FEB-1997.
XX
PF 21-MAR-1996; 96WO-US03845.
XX
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1997-132578/12.
XX
PT Anti-fungal peptide(s) derived from or based on domain III of
PT bactericidal-permeability-increasing protein - are used in vitro or
PT in vivo as a fungicides
XX
PS Claim 1; Page 178; 230pp; English.
XX
CC This is a specifically claimed anti-fungal peptide which is based on
CC domain III (amino acids 142-160) of bactericidal-permeability-increasing
CC protein (BPI), isolated from the granules of mammalian polymorphonuclear
CC leukocytes. It is used in compositions with diluents, carriers or
CC adjuvants to treat fungal infections in patients. It may also be used in
CC vitro to kill or inhibit the replication of fungi, such as in
CC decontaminating fluids and sterilising medical and implant devices.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 18; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
|| |||||||
Db 1 KWLIQLFHKK 10

RESULT 11
AAW44603
ID AAW44603 standard; peptide; 10 AA.
XX
AC AAW44603;
XX
DT 27-APR-1998 (first entry)
XX
DE Anti-fungal peptide #204 based on BPI protein (residues 142-169).
XX
KW Anti-fungal peptide; bactericidal-permeability-increasing protein; BPI;
KW polymorphonuclear leukocyte; fungicide.
XX
OS Synthetic.
OS Mammalia.
XX
FH Key Location/Qualifiers
FT Modified-site 1
FT /note= "N-terminal acetyl"
FT Modified-site 10
FT /note= "C-terminal amide"
XX
PN WO9704008-A1.
XX
PD 06-FEB-1997.
XX
PF 21-MAR-1996; 96WO-US03845.
XX
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1997-132578/12.
XX
PT Anti-fungal peptide(s) derived from or based on domain III of
PT bactericidal-permeability-increasing protein - are used in vitro or
PT in vivo as a fungicides
XX

PS Claim 1; Page 211; 230pp; English.
XX
CC This is a specifically claimed anti-fungal peptide which is based on
CC domain III (amino acids 142-160) of bactericidal-permeability-increasing
CC protein (BPI), isolated from the granules of mammalian polymorphonuclear
CC leukocytes. It is used in compositions with diluents, carriers or
CC adjuvants to treat fungal infections in patients. It may also be used in
CC vitro to kill or inhibit the replication of fungi, such as in
CC decontaminating fluids and sterilising medical and implant devices.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 18; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 12
AAW44644
ID AAW44644 standard; peptide; 10 AA.
XX
AC AAW44644;
XX
DT 27-APR-1998 (first entry)
XX
DE Anti-fungal peptide #245 based on BPI protein (residues 142-169).
XX
KW Anti-fungal peptide; bactericidal-permeability-increasing protein; BPI;
KW polymorphonuclear leukocyte; fungicide.
XX
OS Synthetic.
OS Mammalia.
XX
FH Key Location/Qualifiers
FT Misc-difference 1..10
FT /note= "D-form residues"
FT Modified-site 1
FT /note= "N-terminus modified by CH3-(CH2)10CO"
FT Modified-site 10
FT /note= "C-terminal amide"
XX
PN WO9704008-A1.
XX
PD 06-FEB-1997.
XX
PF 21-MAR-1996; 96WO-US03845.
XX
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1997-132578/12.
XX
PT Anti-fungal peptide(s) derived from or based on domain III of
PT bactericidal-permeability-increasing protein - are used in vitro or
PT in vivo as a fungicides
XX
PS Claim 1; -pp; 230pp; English.
XX
CC This is a specifically claimed anti-fungal peptide which is based on
CC domain III (amino acids 142-160) of bactericidal-permeability-increasing
CC protein (BPI), isolated from the granules of mammalian polymorphonuclear
CC leukocytes. It is used in compositions with diluents, carriers or
CC adjuvants to treat fungal infections in patients. It may also be used in
CC vitro to kill or inhibit the replication of fungi, such as in
CC decontaminating fluids and sterilising medical and implant devices.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 18; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 13
AAW44645
ID AAW44645 standard; peptide; 10 AA.
XX
AC AAW44645;
XX
DT 27-APR-1998 (first entry)
XX
DE Anti-fungal peptide #246 based on BPI protein (residues 142-169).
XX
KW Anti-fungal peptide; bactericidal-permeability-increasing protein; BPI;
KW polymorphonuclear leukocyte; fungicide.
XX
OS Synthetic.
OS Mammalia.
XX
FH Key Location/Qualifiers
FT Misc-difference 1..10
FT /note= "D-form residues"
FT Modified-site 1
FT /note= "N-terminus modified by NH2-(CH2)7CO"
FT Modified-site 10
FT /note= "C-terminal amide"
XX
PN WO9704008-A1.
XX
PD 06-FEB-1997.
XX
PF 21-MAR-1996; 96WO-US03845.
XX
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1997-132578/12.
XX
PT Anti-fungal peptide(s) derived from or based on domain III of
PT bactericidal-permeability-increasing protein - are used in vitro or
PT in vivo as a fungicides
XX
PS Claim 1; -pp; 230pp; English.
XX
CC This is a specifically claimed anti-fungal peptide which is based on
CC domain III (amino acids 142-160) of bactericidal-permeability-increasing
CC protein (BPI), isolated from the granules of mammalian polymorphonuclear
CC leukocytes. It is used in compositions with diluents, carriers or
CC adjuvants to treat fungal infections in patients. It may also be used in
CC vitro to kill or inhibit the replication of fungi, such as in
CC decontaminating fluids and sterilising medical and implant devices.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 18; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

```
RESULT 14
AAW44646
ID   AAW44646 standard; peptide; 10 AA.
XX
AC   AAW44646;
XX
DT   27-APR-1998  (first entry)
XX
DE   Anti-fungal peptide #247 based on BPI protein (residues 142-169).
XX
KW   Anti-fungal peptide; bactericidal-permeability-increasing protein; BPI;
KW   polymorphonuclear leukocyte; fungicide.
XX
OS   Synthetic.
OS   Mammalia.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1..10
FT                   /note= "D-form residues"
FT   Modified-site   1
FT                   /note= "N-terminus modified by NH2-(CH2)11CO"
FT   Modified-site   10
FT                   /note= "C-terminal amide"
XX
PN   WO9704008-A1.
XX
PD   06-FEB-1997.
XX
PF   21-MAR-1996;   96WO-US03845.
XX
PR   20-JUL-1995;   95US-0504841.
XX
PA   (XOMA ) XOMA CORP.
XX
PI   Fadem MB,  Lim E,  Little RG;
XX
DR   WPI; 1997-132578/12.
XX
PT   Anti-fungal peptide(s) derived from or based on domain III of
PT   bactericidal-permeability-increasing protein - are used in vitro or
PT   in vivo as a fungicides
XX
PS   Claim 1; -pp; 230pp; English.
XX
CC   This is a specifically claimed anti-fungal peptide which is based on
CC   domain III (amino acids 142-160) of bactericidal-permeability-increasing
CC   protein (BPI), isolated from the granules of mammalian polymorphonuclear
CC   leukocytes. It is used in compositions with diluents, carriers or
CC   adjuvants to treat fungal infections in patients. It may also be used in
CC   vitro to kill or inhibit the replication of fungi, such as in
CC   decontaminating fluids and sterilising medical and implant devices.
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 18;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 15
AAW44643
ID   AAW44643 standard; peptide; 10 AA.
XX
AC   AAW44643;
XX
DT   27-APR-1998  (first entry)
XX
DE   Anti-fungal peptide #244 based on BPI protein (residues 142-169).
XX
KW   Anti-fungal peptide; bactericidal-permeability-increasing protein; BPI;
KW   polymorphonuclear leukocyte; fungicide.
XX
OS   Synthetic.
OS   Mammalia.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1..10
FT                   /note= "D-form residues"
FT   Modified-site   1
FT                   /note= "N-terminus modified by CH3-(CH2)6CO"
FT   Modified-site   10
FT                   /note= "C-terminal amide"
XX
PN   WO9704008-A1.
XX
PD   06-FEB-1997.
XX
PF   21-MAR-1996;   96WO-US03845.
XX
PR   20-JUL-1995;   95US-0504841.
XX
PA   (XOMA ) XOMA CORP.
XX
PI   Fadem MB,  Lim E,  Little RG;
XX
DR   WPI; 1997-132578/12.
XX
PT   Anti-fungal peptide(s) derived from or based on domain III of
PT   bactericidal-permeability-increasing protein - are used in vitro or
PT   in vivo as a fungicides
XX
PS   Claim 1; -pp; 230pp; English.
XX
CC   This is a specifically claimed anti-fungal peptide which is based on
CC   domain III (amino acids 142-160) of bactericidal-permeability-increasing
CC   protein (BPI), isolated from the granules of mammalian polymorphonuclear
CC   leukocytes. It is used in compositions with diluents, carriers or
CC   adjuvants to treat fungal infections in patients. It may also be used in
CC   vitro to kill or inhibit the replication of fungi, such as in
CC   decontaminating fluids and sterilising medical and implant devices.
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 18;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 16
AAY00570
ID   AAY00570 standard; Peptide; 10 AA.
XX
AC   AAY00570;
XX
DT   07-MAY-1999  (first entry)
XX
DE   Antifungal peptide XMP.363.
XX
KW   Antifungal; BPI; bactericidal/permeability increasing protein;
KW   Candida infection.
XX
OS   Synthetic.
XX
PN   US5858974-A.
XX
PD   12-JAN-1999.
XX
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PF 21-MAR-1996; 96US-0621259.
XX
PR 21-MAR-1996; 96US-0621259.
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1999-119956/10.
XX
PT Antifungal peptides - comprising part of bactericidal or
PT permeability-increasing protein sequence or related sequence
XX
PS Disclosure; Columns 189-190; 132pp; English.
XX
CC New peptides are provided which are based on Domain III (amino acids
CC 142-169) of human bactericidal/permeability-increasing protein (BPI).
CC The peptides all have a C-terminal amide. More particularly, the Claims
CC relate to: (1) a peptide that has an amino acid sequence of human BPI
CC from position 148 to position 161 (KSKVGWLIQLFHKK) and variants of the
CC sequence having antifungal activity; and (2) an antifungal peptide
CC having 6-14 amino acids comprising (a) a core sequence selected from
CC LIQL, IQLF, WLIQL, LIQLF and WLIQLF and (b) one or more cationic amino
CC acids selected from K, R, H, Orn (ornithine) and Dab (diaminobutyric
CC acid) at the N and/or C terminus of the core sequence. The new peptides
CC are used for killing or inhibiting replication of fungi in vitro; and
CC for treating fungal infections in vivo, in particular infections of
CC Candida, Aspergillus or Cryptococcus spp., especially C. albicans, C.
CC krusei, C. lusitaniae, C. parapsilosis or C. tropicalis. The peptide
CC can be administered topically, intravenously, orally or as an aerosol,
CC optionally together with a non-peptide antifungal agent.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 20; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 17
AAY00571
ID AAY00571 standard; Peptide; 10 AA.
XX
AC AAY00571;
XX
DT 07-MAY-1999 (first entry)
XX
DE Antifungal peptide XMP.364.
XX
KW Antifungal; BPI; bactericidal/permeability increasing protein;
KW Candida infection.
XX
OS Synthetic.
XX
PN US5858974-A.
XX
PD 12-JAN-1999.
XX
PF 21-MAR-1996; 96US-0621259.
XX
PR 21-MAR-1996; 96US-0621259.
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1999-119956/10.
XX
PT Antifungal peptides - comprising part of bactericidal or
PT permeability-increasing protein sequence or related sequence
XX
PS Disclosure; Columns 189-190; 132pp; English.
XX
CC New peptides are provided which are based on Domain III (amino acids
CC 142-169) of human bactericidal/permeability-increasing protein (BPI).
CC The peptides all have a C-terminal amide. More particularly, the Claims
CC relate to: (1) a peptide that has an amino acid sequence of human BPI
CC from position 148 to position 161 (KSKVGWLIQLFHKK) and variants of the
CC sequence having antifungal activity; and (2) an antifungal peptide
CC having 6-14 amino acids comprising (a) a core sequence selected from
CC LIQL, IQLF, WLIQL, LIQLF and WLIQLF and (b) one or more cationic amino
CC acids selected from K, R, H, Orn (ornithine) and Dab (diaminobutyric
CC acid) at the N and/or C terminus of the core sequence. The new peptides
CC are used for killing or inhibiting replication of fungi in vitro; and
CC for treating fungal infections in vivo, in particular infections of
CC Candida, Aspergillus or Cryptococcus spp., especially C. albicans, C.
CC krusei, C. lusitaniae, C. parapsilosis or C. tropicalis. The peptide
CC can be administered topically, intravenously, orally or as an aerosol,
CC optionally together with a non-peptide antifungal agent.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 20; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 18
AAY00572
ID AAY00572 standard; Peptide; 10 AA.
XX
AC AAY00572;
XX
DT 07-MAY-1999 (first entry)
XX
DE Antifungal peptide XMP.365.
XX
KW Antifungal; BPI; bactericidal/permeability increasing protein;
KW Candida infection.
XX
OS Synthetic.
XX
PN US5858974-A.
XX
PD 12-JAN-1999.
XX
PF 21-MAR-1996; 96US-0621259.
XX
PR 21-MAR-1996; 96US-0621259.
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1999-119956/10.
XX
PT Antifungal peptides - comprising part of bactericidal or
PT permeability-increasing protein sequence or related sequence
XX
PS Disclosure; Columns 191-192; 132pp; English.
XX
CC New peptides are provided which are based on Domain III (amino acids
CC 142-169) of human bactericidal/permeability-increasing protein (BPI).
CC The peptides all have a C-terminal amide. More particularly, the Claims
CC relate to: (1) a peptide that has an amino acid sequence of human BPI

CC from position 148 to position 161 (KSKVGWLIQLFHKK) and variants of the
CC sequence having antifungal activity; and (2) an antifungal peptide
CC having 6-14 amino acids comprising (a) a core sequence selected from
CC LIQL, IQLF, WLIQL, LIQLF and WLIQLF and (b) one or more cationic amino
CC acids selected from K, R, H, Orn (ornithine) and Dab (diaminobutyric
CC acid) at the N and/or C terminus of the core sequence. The new peptides
CC are used for killing or inhibiting replication of fungi in vitro; and
CC for treating fungal infections in vivo, in particular infections of
CC Candida, Aspergillus or Cryptococcus spp., especially C. albicans, C.
CC krusei, C. lusitaniae, C. parapsilosis or C. tropicalis. The peptide
CC can be administered topically, intravenously, orally or as an aerosol,
CC optionally together with a non-peptide antifungal agent.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 20; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 19
AAY00573
ID AAY00573 standard; Peptide; 10 AA.
XX
AC AAY00573;
XX
DT 07-MAY-1999 (first entry)
XX
DE Antifungal peptide XMP.366.
XX
KW Antifungal; BPI; bactericidal/permeability increasing protein;
KW Candida infection.
XX
OS Synthetic.
XX
PN US5858974-A.
XX
PD 12-JAN-1999.
XX
PF 21-MAR-1996; 96US-0621259.
XX
PR 21-MAR-1996; 96US-0621259.
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1999-119956/10.
XX
PT Antifungal peptides - comprising part of bactericidal or
PT permeability-increasing protein sequence or related sequence
XX
PS Disclosure; Columns 191-192; 132pp; English.
XX
CC New peptides are provided which are based on Domain III (amino acids
CC 142-169) of human bactericidal/permeability-increasing protein (BPI).
CC The peptides all have a C-terminal amide. More particularly, the Claims
CC relate to: (1) a peptide that has an amino acid sequence of human BPI
CC from position 148 to position 161 (KSKVGWLIQLFHKK) and variants of the
CC sequence having antifungal activity; and (2) an antifungal peptide
CC having 6-14 amino acids comprising (a) a core sequence selected from
CC LIQL, IQLF, WLIQL, LIQLF and WLIQLF and (b) one or more cationic amino
CC acids selected from K, R, H, Orn (ornithine) and Dab (diaminobutyric
CC acid) at the N and/or C terminus of the core sequence. The new peptides
CC are used for killing or inhibiting replication of fungi in vitro; and
CC for treating fungal infections in vivo, in particular infections of
CC Candida, Aspergillus or Cryptococcus spp., especially C. albicans, C.
CC krusei, C. lusitaniae, C. parapsilosis or C. tropicalis. The peptide
CC can be administered topically, intravenously, orally or as an aerosol,
CC optionally together with a non-peptide antifungal agent.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 20; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 20
AAY00580
ID AAY00580 standard; Peptide; 10 AA.
XX
AC AAY00580;
XX
DT 07-MAY-1999 (first entry)
XX
DE Antifungal peptide XMP.373.
XX
KW Antifungal; BPI; bactericidal/permeability increasing protein;
KW Candida infection.
XX
OS Synthetic.
XX
PN US5858974-A.
XX
PD 12-JAN-1999.
XX
PF 21-MAR-1996; 96US-0621259.
XX
PR 21-MAR-1996; 96US-0621259.
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1999-119956/10.
XX
PT Antifungal peptides - comprising part of bactericidal or
PT permeability-increasing protein sequence or related sequence
XX
PS Disclosure; Columns 197-198; 132pp; English.
XX
CC New peptides are provided which are based on Domain III (amino acids
CC 142-169) of human bactericidal/permeability-increasing protein (BPI).
CC The peptides all have a C-terminal amide. More particularly, the Claims
CC relate to: (1) a peptide that has an amino acid sequence of human BPI
CC from position 148 to position 161 (KSKVGWLIQLFHKK) and variants of the
CC sequence having antifungal activity; and (2) an antifungal peptide
CC having 6-14 amino acids comprising (a) a core sequence selected from
CC LIQL, IQLF, WLIQL, LIQLF and WLIQLF and (b) one or more cationic amino
CC acids selected from K, R, H, Orn (ornithine) and Dab (diaminobutyric
CC acid) at the N and/or C terminus of the core sequence. The new peptides
CC are used for killing or inhibiting replication of fungi in vitro; and
CC for treating fungal infections in vivo, in particular infections of
CC Candida, Aspergillus or Cryptococcus spp., especially C. albicans, C.
CC krusei, C. lusitaniae, C. parapsilosis or C. tropicalis. The peptide
CC can be administered topically, intravenously, orally or as an aerosol,
CC optionally together with a non-peptide antifungal agent.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 20; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10

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                  ||:|||.|:||
Db          1 KWLIQLFHKK 10


RESULT 21
AAY00502
ID   AAY00502 standard; Peptide; 10 AA.
XX
AC   AAY00502;
XX
DT   07-MAY-1999  (first entry)
XX
DE   Antifungal peptide XMP.293.
XX
KW   Antifungal; BPI; bactericidal/permeability increasing protein;
KW   Candida infection.
XX
OS   Synthetic.
XX
PN   US5858974-A.
XX
PD   12-JAN-1999.
XX
PF   21-MAR-1996;   96US-0621259.
XX
PR   21-MAR-1996;   96US-0621259.
PR   20-JUL-1995;   95US-0504841.
XX
PA   (XOMA ) XOMA CORP.
XX
PI   Fadem MB,  Lim E,  Little RG;
XX
DR   WPI; 1999-119956/10.
XX
PT   Antifungal peptides - comprising part of bactericidal or
PT   permeability-increasing protein sequence or related sequence
XX
PS   Disclosure; Columns 143-144; 132pp; English.
XX
CC   New peptides are provided which are based on Domain III (amino acids
CC   142-169) of human bactericidal/permeability-increasing protein (BPI).
CC   The peptides all have a C-terminal amide. More particularly, the Claims
CC   relate to: (1) a peptide that has an amino acid sequence of human BPI
CC   from position 148 to position 161 (KSKVGWLIQLFHKK) and variants of the
CC   sequence having antifungal activity; and (2) an antifungal peptide
CC   having 6-14 amino acids comprising (a) a core sequence selected from
CC   LIQL, IQLF, WLIQL, LIQLF and WLIQLF and (b) one or more cationic amino
CC   acids selected from K, R, H, Orn (ornithine) and Dab (diaminobutyric
CC   acid) at the N and/or C terminus of the core sequence. The new peptides
CC   are used for killing or inhibiting replication of fungi in vitro; and
CC   for treating fungal infections in vivo, in particular infections of
CC   Candida, Aspergillus or Cryptococcus spp., especially C. albicans, C.
CC   krusei, C. lusitaniae, C. parapsilosis or C. tropicalis. The peptide
CC   can be administered topically, intravenously, orally or as an aerosol,
CC   optionally together with a non-peptide antifungal agent.
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 20;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 22
AAY00620
ID   AAY00620 standard; Peptide; 10 AA.
XX
AC   AAY00620;
XX
DT   07 MAY-1999  (first entry)
XX
DE   Antifungal peptide XMP.414.
XX
KW   Antifungal; BPI; bactericidal/permeability increasing protein;
KW   Candida infection.
XX
OS   Synthetic.
XX
PN   US5858974-A.
XX
PD   12-JAN-1999.
XX
PF   21-MAR-1996;   96US-0621259.
XX
PR   21-MAR-1996;   96US-0621259.
PR   20-JUL-1995;   95US-0504841.
XX
PA   (XOMA ) XOMA CORP.
XX
PI   Fadem MB,  Lim E,  Little RG;
XX
DR   WPI; 1999-119956/10.
XX
PT   Antifungal peptides - comprising part of bactericidal or
PT   permeability-increasing protein sequence or related sequence
XX
PS   Claim 2; Columns 225-226; 132pp; English.
XX
CC   New peptides are provided which are based on Domain III (amino acids
CC   142-169) of human bactericidal/permeability-increasing protein (BPI).
CC   The peptides all have a C-terminal amide. More particularly, the Claims
CC   relate to: (1) a peptide that has an amino acid sequence of human BPI
CC   from position 148 to position 161 (KSKVGWLIQLFHKK) and variants of the
CC   sequence having antifungal activity; and (2) an antifungal peptide
CC   having 6-14 amino acids comprising (a) a core sequence selected from
CC   LIQL, IQLF, WLIQL, LIQLF and WLIQLF and (b) one or more cationic amino
CC   acids selected from K, R, H, Orn (ornithine) and Dab (diaminobutyric
CC   acid) at the N and/or C terminus of the core sequence. The new peptides
CC   are used for killing or inhibiting replication of fungi in vitro; and
CC   for treating fungal infections in vivo, in particular infections of
CC   Candida, Aspergillus or Cryptococcus spp., especially C. albicans, C.
CC   krusei, C. lusitaniae, C. parapsilosis or C. tropicalis. The peptide
CC   can be administered topically, intravenously, orally or as an aerosol,
CC   optionally together with a non-peptide antifungal agent.
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 20;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 23
AAY00621
ID   AAY00621 standard; Peptide; 10 AA.
XX
AC   AAY00621;
XX
DT   07-MAY-1999  (first entry)
XX
DE   Antifungal peptide XMP.415.
XX
KW   Antifungal; BPI; bactericidal/permeability increasing protein;
KW   Candida infection.
XX
OS   Synthetic.
XX
PN   US5858974-A.
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XX
PD 12-JAN-1999.
XX
PF 21-MAR-1996; 96US-0621259.
XX
PR 21-MAR-1996; 96US-0621259.
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1999-119956/10.
XX
PT Antifungal peptides - comprising part of bactericidal or
PT permeability-increasing protein sequence or related sequence
XX
PS Claim 2; Columns 225-226; 132pp; English.
XX
CC New peptides are provided which are based on Domain III (amino acids
CC 142-169) of human bactericidal/permeability-increasing protein (BPI).
CC The peptides all have a C-terminal amide. More particularly, the Claims
CC relate to: (1) a peptide that has an amino acid sequence of human BPI
CC from position 148 to position 161 (KSKVGWLIQLFHKK) and variants of the
CC sequence having antifungal activity; and (2) an antifungal peptide
CC having 6-14 amino acids comprising (a) a core sequence selected from
CC LIQL, IQLF, WLIQL, LIQLF and WLIQLF and (b) one or more cationic amino
CC acids selected from K, R, H, Orn (ornithine) and Dab (diaminobutyric
CC acid) at the N and/or C terminus of the core sequence. The new peptides
CC are used for killing or inhibiting replication of fungi in vitro; and
CC for treating fungal infections in vivo, in particular infections of
CC Candida, Aspergillus or Cryptococcus spp., especially C. albicans, C.
CC krusei, C. lusitaniae, C. parapsilosis or C. tropicalis. The peptide
CC can be administered topically, intravenously, orally or as an aerosol,
CC optionally together with a non-peptide antifungal agent.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 20; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 24
AAY00622
ID AAY00622 standard; Peptide; 10 AA.
XX
AC AAY00622;
XX
DT 07-MAY-1999 (first entry)
XX
DE Antifungal peptide XMP.416.
XX
KW Antifungal; BPI; bactericidal/permeability increasing protein;
KW Candida infection.
XX
OS Synthetic.
XX
PN US5858974-A.
XX
PD 12-JAN-1999.
XX
PF 21-MAR-1996; 96US-0621259.
XX
PR 21-MAR-1996; 96US-0621259.
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1999-119956/10.
XX
PT Antifungal peptides - comprising part of bactericidal or
PT permeability-increasing protein sequence or related sequence
XX
PS Claim 2; Columns 227-228; 132pp; English.
XX
CC New peptides are provided which are based on Domain III (amino acids
CC 142-169) of human bactericidal/permeability-increasing protein (BPI).
CC The peptides all have a C-terminal amide. More particularly, the Claims
CC relate to: (1) a peptide that has an amino acid sequence of human BPI
CC from position 148 to position 161 (KSKVGWLIQLFHKK) and variants of the
CC sequence having antifungal activity; and (2) an antifungal peptide
CC having 6-14 amino acids comprising (a) a core sequence selected from
CC LIQL, IQLF, WLIQL, LIQLF and WLIQLF and (b) one or more cationic amino
CC acids selected from K, R, H, Orn (ornithine) and Dab (diaminobutyric
CC acid) at the N and/or C terminus of the core sequence. The new peptides
CC are used for killing or inhibiting replication of fungi in vitro; and
CC for treating fungal infections in vivo, in particular infections of
CC Candida, Aspergillus or Cryptococcus spp., especially C. albicans, C.
CC krusei, C. lusitaniae, C. parapsilosis or C. tropicalis. The peptide
CC can be administered topically, intravenously, orally or as an aerosol,
CC optionally together with a non-peptide antifungal agent.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 20; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 25
AAY00623
ID AAY00623 standard; Peptide; 10 AA.
XX
AC AAY00623;
XX
DT 07-MAY-1999 (first entry)
XX
DE Antifungal peptide XMP.417.
XX
KW Antifungal; BPI; bactericidal/permeability increasing protein;
KW Candida infection.
XX
OS Synthetic.
XX
PN US5858974-A.
XX
PD 12-JAN-1999.
XX
PF 21-MAR-1996; 96US-0621259.
XX
PR 21-MAR-1996; 96US-0621259.
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1999-119956/10.
XX
PT Antifungal peptides - comprising part of bactericidal or
PT permeability-increasing protein sequence or related sequence
XX
PS Claim 2; Columns 227-228; 132pp; English.
XX
CC New peptides are provided which are based on Domain III (amino acids

CC 142-169) of human bactericidal/permeability-increasing protein (BPI).
CC The peptides all have a C-terminal amide. More particularly, the Claims
CC relate to: (1) a peptide that has an amino acid sequence of human BPI
CC from position 148 to position 161 (KSKVGWLIQLFHKK) and variants of the
CC sequence having antifungal activity; and (2) an antifungal peptide
CC having 6-14 amino acids comprising (a) a core sequence selected from
CC LIQL, IQLF, WLIQL, LIQLF and WLIQLF and (b) one or more cationic amino
CC acids selected from K, R, H, Orn (ornithine) and Dab (diaminobutyric
CC acid) at the N and/or C terminus of the core sequence. The new peptides
CC are used for killing or inhibiting replication of fungi in vitro; and
CC for treating fungal infections in vivo, in particular infections of
CC Candida, Aspergillus or Cryptococcus spp., especially C. albicans, C.
CC krusei, C. lusitaniae, C. parapsilosis or C. tropicalis. The peptide
CC can be administered topically, intravenously, orally or as an aerosol,
CC optionally together with a non-peptide antifungal agent.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 20; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 26
AAY00626
ID AAY00626 standard; Peptide; 10 AA.
XX
AC AAY00626;
XX
DT 07-MAY-1999 (first entry)
XX
DE Antifungal peptide XMP.420.
XX
KW Antifungal; BPI; bactericidal/permeability increasing protein;
KW Candida infection.
XX
OS Synthetic.
XX
PN US5858974-A.
XX
PD 12-JAN-1999.
XX
PF 21-MAR-1996; 96US-0621259.
XX
PR 21-MAR-1996; 96US-0621259.
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1999-119956/10.
XX
PT Antifungal peptides - comprising part of bactericidal or
PT permeability-increasing protein sequence or related sequence
XX
PS Claim 2; Columns 229-230; 132pp; English.
XX
CC New peptides are provided which are based on Domain III (amino acids
CC 142-169) of human bactericidal/permeability-increasing protein (BPI).
CC The peptides all have a C-terminal amide. More particularly, the Claims
CC relate to: (1) a peptide that has an amino acid sequence of human BPI
CC from position 148 to position 161 (KSKVGWLIQLFHKK) and variants of the
CC sequence having antifungal activity; and (2) an antifungal peptide
CC having 6-14 amino acids comprising (a) a core sequence selected from
CC LIQL, IQLF, WLIQL, LIQLF and WLIQLF and (b) one or more cationic amino
CC acids selected from K, R, H, Orn (ornithine) and Dab (diaminobutyric
CC acid) at the N and/or C terminus of the core sequence. The new peptides
CC are used for killing or inhibiting replication of fungi in vitro; and
CC for treating fungal infections in vivo, in particular infections of
CC Candida, Aspergillus or Cryptococcus spp., especially C. albicans, C.
CC krusei, C. lusitaniae, C. parapsilosis or C. tropicalis. The peptide
CC can be administered topically, intravenously, orally or as an aerosol,
CC optionally together with a non-peptide antifungal agent.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 20; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||:|||||
Db 1 KWLIQLFHKK 10

RESULT 27
AAB31779
ID AAB31779 standard; peptide; 10 AA.
XX
AC AAB31779;
XX
DT 30-APR-2001 (first entry)
XX
DE Bactericidal/permeability-increasing protein (BPI) derived peptide.
XX
KW Bactericidal increasing-increasing protein; BPI; antimicrobial;
KW ATP synthase; F1/F0 ATPase; pathogenic organism; microbial infection;
KW insecticide; herbicide; cancer; neoplastic disease; autoimmune disease;
KW wart.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 10
FT /note= "amidated residue"
XX
PN WO200104347-A1.
XX
PD 18-JAN-2001.
XX
PF 06-APR-2000; 2000WO-US09137.
XX
PR 12-JUL-1999; 99US-0143373.
XX
PA (XOMA) XOMA TECHNOLOGY LTD.
XX
PI Little RG, Abrahamson S;
XX
DR WPI; 2001-159408/16.
XX
PT Identifying antimicrobial compounds, useful for treating microbial
PT infections, cancer or other neoplastic diseases such as lymphomas lung
PT cancer and autoimmune diseases, comprises targeting the function of
PT adenosine triphosphate synthase, -
XX
PS Example 2; Page 58; 61pp; English.
XX
CC The present sequence represents a peptide which is derived from a
CC bactericidal/increasing-increasing protein (BPI). The peptide is
CC designated rBPI21 XMP.365. Peptides derived from BPI are potential
CC candidate antimicrobial compounds. They act by a unique mechanism
CC involving inhibition of the ATP synthase F1/F0 ATPase. The specification
CC describes a method for identifying such peptides. The method is used to
CC identify antimicrobial compounds that are active against pathogenic
CC organisms that rely on ATP synthase for aerobic metabolism. The
CC identified antimicrobial compounds are useful for treating microbial
CC infections. The methods are useful for identifying new insecticidal
CC agents or new herbicidal agents that are active against plant organisms.
CC The antimicrobial compounds are also suitable for in vitro use e.g. as
CC a preservative or decontaminant, and for sterilisation. They are also
CC useful for killing or inhibiting growth of insects or plants. BPI derived

CC protein products in association with appropriate targeting agents are
CC useful as antiproliferative or cytotoxic agents that can be used to
CC treat conditions such as cancer or other neoplastic diseases (such as
CC lymphomas, lung cancer, gastrointestinal cancer, skin cancer), autoimmune
CC disease (rheumatoid arthritis, psoriasis, endometriosis, warts), etc..
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 28
AAB31781
ID AAB31781 standard; peptide; 10 AA.
XX
AC AAB31781;
XX
DT 30-APR-2001 (first entry)
XX
DE Bactericidal/permeability-increasing protein (BPI) derived peptide.
XX
KW Bactericidal increasing-increasing protein; BPI; antimicrobial;
KW ATP synthase; F1/F0 ATPase; pathogenic organism; microbial infection;
KW insecticide; herbicide; cancer; neoplastic disease; autoimmune disease;
KW wart.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Misc-difference 1..10
FT /note= "D-form residues"
FT Modified-site 1
FT /note= "8-amino-octanyl group at N-terminus"
FT Modified-site 10
FT /note= "amidated residue"
XX
PN WO200104347-A1.
XX
PD 18-JAN-2001.
XX
PF 06-APR-2000; 2000WO-US09137.
XX
PR 12-JUL-1999; 99US-0143373.
XX
PA (XOMA) XOMA TECHNOLOGY LTD.
XX
PI Little RG, Abrahamson S;
XX
DR WPI; 2001-159408/16.
XX
PT Identifying antimicrobial compounds, useful for treating microbial
PT infections, cancer or other neoplastic diseases such as lymphomas lung
PT cancer and autoimmune diseases, comprises targeting the function of
PT adenosine triphosphate synthase, -
XX
PS Example 5; Page 59; 61pp; English.
XX
CC The present sequence represents a peptide which is derived from a
CC bactericidal/increasing-increasing protein (BPI). The peptide is
CC designated XMP.416. Peptides derived from BPI are potential candidate
CC antimicrobial compounds. They act by a unique mechanism involving
CC inhibition of the ATP synthase F1/F0 ATPase. The specification describes
CC a method for identifying such peptides. The method is used to identify
CC antimicrobial compounds that are active against pathogenic organisms that
CC rely on ATP synthase for aerobic metabolism. The identified antimicrobial
CC compounds are useful for treating microbial infections. The methods are
CC useful for identifying new insecticidal agents or new herbicidal agents
CC that are active against plant organisms. The antimicrobial compounds are
CC also suitable for in vitro use e.g. as a preservative or decontaminant,
CC and for sterilisation. They are also useful for killing or inhibiting
CC growth of insects or plants. BPI derived protein products in association
CC with appropriate targeting agents are useful as antiproliferative or
CC cytotoxic agents that can be used to treat conditions such as cancer or
CC other neoplastic diseases (such as lymphomas, lung cancer,
CC gastrointestinal cancer, skin cancer), autoimmune disease (rheumatoid
CC arthritis, psoriasis, endometriosis, warts), etc..
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 29
AAB61892
ID AAB61892 standard; peptide; 10 AA.
XX
AC AAB61892;
XX
DT 08-MAY-2001 (first entry)
XX
DE Human BPI protein derived peptide XMP.365.
XX
KW BPI protein; adenosine triphosphatase; ATPase; gastric acid; human;
KW H+/K+ ATPase; bactericidal permeability increasing protein; ulcer;
KW gastrointestinal; inflammatory disease; gastroesophageal reflux disease;
KW esophagitis; gastritis; duodenitis; gastric cancer; gastrinoma; GERD;
KW cytostatic.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Misc-difference 1..10
FT /note= "D-form residues"
FT Modified-site 10
FT /note= "C-terminal amide"
XX
PN WO200103724-A1.
XX
PD 18-JAN-2001.
XX
PF 06-APR-2000; 2000WO-US09125.
XX
PR 12-JUL-1999; 99US-0143374.
XX
PA (XOMA) XOMA TECHNOLOGY LTD.
XX
PI Little RG, Abrahamson S;
XX
DR WPI; 2001-138258/14.
XX
PT Inhibiting H+/K+ adenosine triphosphatase activity, including gastric
PT acid secretion for treating gastric ulcer and gastrointestinal
PT inflammatory disease, using a bactericidal permeability increasing
PT protein product -
XX
PS Disclosure; Page 34; 40pp; English.
XX
CC The invention relates to inhibiting H+/K+ adenosine triphosphatase
CC (ATPase) activity, including inhibiting gastric acid secretion in a
CC mammal suffering from a condition exacerbated by acid secretion involving
CC H+/K+ ATPase activity. The method involves administering bactericidal
CC permeability increasing (BPI) protein product to the mammal. The BPI
CC protein is useful for treating gastrointestinal ulcer disease and
CC gastrointestinal inflammatory disease or others condition exacerbated by

CC gastric acidity such as gastroesophageal reflux disease (GERD), gastric
CC cancers, esophagitis, gastritis, duodenitis, gastrinomas, Zollinger-
CC Ellison syndrome, acute upper gastrointestinal bleeding, gastric ulcers,
CC duodenal ulcers, stress ulcers, ingestion of corrosive chemicals,
CC aspiration pneumonia, chronic or excessive alcohol consumption, patients
CC in intensive care situations, or pre-and/or postoperatively to prevent
CC aspiration of gastric acid. The present sequence represents a peptide
CC fragment derived from the human BPI protein.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 30
AAB61894
ID AAB61894 standard; peptide; 10 AA.
XX
AC AAB61894;
XX
DT 08-MAY-2001 (first entry)
XX
DE Human BPI protein derived peptide XMP.416.
XX
KW BPI protein; adenosine triphosphatase; ATPase; gastric acid; human;
KW H+/K+ ATPase; bactericidal permeability increasing protein; ulcer;
KW gastrointestinal; inflammatory disease; gastroesophageal reflux disease;
KW esophagitis; gastritis; duodenitis; gastric cancer; gastrinoma; GERD;
KW cytostatic.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Misc-difference 1..10
FT /note= "D-form residues"
FT Modified-site 1
FT /note= "8-amino-octanyl group; NH2-(CH2)7-CO at
FT N-terminus"
FT Modified-site 10
FT /note= "C-terminal amide"
XX
PN WO200103724-A1.
XX
PD 18-JAN-2001.
XX
PF 06-APR-2000; 2000WO-US09125.
XX
PR 12-JUL-1999; 99US-0143374.
XX
PA (XOMA) XOMA TECHNOLOGY LTD.
XX
PI Little RG, Abrahamson S;
XX
DR WPI; 2001-138258/14.
XX
PT Inhibiting H+/K+ adenosine triphosphatase activity, including gastric
PT acid secretion for treating gastric ulcer and gastrointestinal
PT inflammatory disease, using a bactericidal permeability increasing
PT protein product -
XX
PS Claim 6; Page 35; 40pp; English.
XX
CC The invention relates to inhibiting H+/K+ adenosine triphosphatase
CC (ATPase) activity, including inhibiting gastric acid secretion in a
CC mammal suffering from a condition exacerbated by acid secretion involving
CC H+/K+ ATPase activity. The method involves administering bactericidal
CC permeability increasing (BPI) protein product to the mammal. The BPI
CC protein is useful for treating gastrointestinal ulcer disease and
CC gastrointestinal inflammatory disease or others condition exacerbated by
CC gastric acidity such as gastroesophageal reflux disease (GERD), gastric
CC cancers, esophagitis, gastritis, duodenitis, gastrinomas, Zollinger-
CC Ellison syndrome, acute upper gastrointestinal bleeding, gastric ulcers,
CC duodenal ulcers, stress ulcers, ingestion of corrosive chemicals,
CC aspiration pneumonia, chronic or excessive alcohol consumption, patients
CC in intensive care situations, or pre-and/or postoperatively to prevent
CC aspiration of gastric acid. The present sequence represents a peptide
CC fragment derived from the human BPI protein, used to inhibit H+/K+
CC ATPase activity.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 31
AAB61914
ID AAB61914 standard; peptide; 10 AA.
XX
AC AAB61914;
XX
DT 08-MAY-2001 (first entry)
XX
DE Human BPI protein derived peptide XMP.365.
XX
KW BPI; antibacterial; antifungal; antimicrobial; dye; infection; human;
KW bactericidal permeability increasing protein.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Misc-difference 1..10
FT /note= "D-form residues"
XX
PN WO200104346-A1.
XX
PD 18-JAN-2001.
XX
PF 06-APR-2000; 2000WO-US09116.
XX
PR 12-JUL-1999; 99US-0143290.
XX
PA (XOMA) XOMA TECHNOLOGY LTD.
XX
PI Little RG;
XX
DR WPI; 2001-138363/14.
XX
PT Method of identifying antimicrobial compounds such as anti-fungal and
PT anti-bacterial compounds involves detecting metabolic activity in
PT presence and absence of test compound using metabolic
PT oxidation-reduction indicator dye -
XX
PS Example 2; Page 47; 49pp; English.
XX
CC The invention relates to a method for identifying an antimicrobial
CC compound that involves contacting a microbial cell with a metabolic
CC activity oxidation-reduction indicator dye in presence and absence of
CC test compound and detecting apparent increase in metabolic activity in
CC presence of compound relative to metabolic activity in absence of
CC compound despite onset of loss or reduction of cell viability. The method
CC is used for identifying anti-microbial, anti-fungal and anti-bacterial
CC compounds. The identified anti-microbial compounds are used for treatment
CC of microbial infection especially in mammals such as humans, farm
CC animals, companion animals and/or laboratory animals. The compounds may

CC be used for in vitro use as a preservative or decontaminant for fluids or
CC surfaces, or to sterilize medical equipment or ex vivo or in situ for
CC prosthetic joints or intravenous lines or catheters. The compounds are
CC also useful for treatment of infection in plants. Sequences AAB61914-17
CC represent peptide derivatives of the human bactericidal permeability
CC increasing (BPI) protein. The BPI-derived peptides have antibacterial
CC activities and can be used to exemplify the effect of the compounds along
CC with the dye on bacteria in the course of the invention.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 32
AAB61916
ID AAB61916 standard; peptide; 10 AA.
XX
AC AAB61916;
XX
DT 08-MAY-2001 (first entry)
XX
DE Human BPI protein derived peptide XMP.416.
XX
KW BPI; antibacterial; antifungal; antimicrobial; dye; infection; human;
KW bactericidal permeability increasing protein.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Misc-difference 1..10
FT /note= "D-form residues"
FT Modified-site 1
FT /note= "8-amino-octanyl group; NH2-(CH2)7-CO at
FT N-terminus"
FT Modified-site 10
FT /note= "C-terminal amide"
XX
PN WO200104346-A1.
XX
PD 18-JAN-2001.
XX
PF 06-APR-2000; 2000WO-US09116.
XX
PR 12-JUL-1999; 99US-0143290.
XX
PA (XOMA) XOMA TECHNOLOGY LTD.
XX
PI Little RG;
XX
DR WPI; 2001-138363/14.
XX
PT Method of identifying antimicrobial compounds such as anti-fungal and
PT anti-bacterial compounds involves detecting metabolic activity in
PT presence and absence of test compound using metabolic
PT oxidation-reduction indicator dye -
XX
PS Disclosure; Page 48; 49pp; English.
XX
CC The invention relates to a method for identifying an antimicrobial
CC compound that involves contacting a microbial cell with a metabolic
CC activity oxidation-reduction indicator dye in presence and absence of
CC test compound and detecting apparent increase in metabolic activity in
CC presence of compound relative to metabolic activity in absence of
CC compound despite onset of loss or reduction of cell viability. The method
CC is used for identifying anti-microbial, anti-fungal and anti-bacterial
CC compounds. The identified anti-microbial compounds are used for treatment
CC of microbial infection especially in mammals such as humans, farm
CC animals, companion animals and/or laboratory animals. The compounds may
CC be used for in vitro use as a preservative or decontaminant for fluids or
CC surfaces, or to sterilize medical equipment or ex vivo or in situ for
CC prosthetic joints or intravenous lines or catheters. The compounds are
CC also useful for treatment of infection in plants. Sequences AAB61914-17
CC represent peptide derivatives of the human bactericidal permeability
CC increasing (BPI) protein. The BPI-derived peptides have antibacterial
CC activities and can be used to exemplify the effect of the compounds along
CC with the dye on bacteria in the course of the invention.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 33
AAB61919
ID AAB61919 standard; peptide; 10 AA.
XX
AC AAB61919;
XX
DT 08-MAY-2001 (first entry)
XX
DE Human BPI protein derived peptide XMP.365.
XX
KW BPI; antifungal; fungal; mitochondrial; ATP synthase; F1/F0 ATPase;
KW FMAS; bactericidal permeability increasing protein; preservative;
KW decontaminant; sterilisation; human.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Misc-difference 1..10
FT /note= "D-form residues"
XX
PN WO200104348-A1.
XX
PD 18-JAN-2001.
XX
PF 06-APR-2000; 2000WO-US09252.
XX
PR 12-JUL-1999; 99US-0143372.
XX
PA (XOMA) XOMA TECHNOLOGY LTD.
XX
PI Little RG, Abrahamson S;
XX
DR WPI; 2001-138364/14.
XX
PT Identifying antifungal compounds by targeting the function of fungal
PT mitochondrial ATP synthase which are useful for treating fungal
PT infections and as preservative or decontaminant for fluids or surfaces
PT -
XX
PS Disclosure; Page 55; 58pp; English.
XX
CC The invention relates to identifying candidate antifungal compounds by
CC targeting the function of fungal mitochondrial ATP synthase F1/F0 ATPase
CC (FMAS). The identified antifungal compounds (bactericidal permeability
CC increasing protein (BPI)-related products) are useful for treating fungal
CC infections in animals and plants. They are also suitable for in vitro use
CC e.g. as a preservative or decontaminant for fluids or surfaces, or use to
CC sterilize surgical or other medical equipment or implantable devices,
CC either ex vivo or in situ, including prosthetic joints or indwelling
CC invasive devices such as intravenous lines or catheters which are often
CC foci of infection, or use in the preparation of growth media for non-

```
CC   fungal cells. The present sequence represents a human BPI protein derived
CC   peptide.
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||| |
Db          1 KWLIQLFHKK 10


RESULT 34
AAB61921
ID   AAB61921 standard; peptide; 10 AA.
XX
AC   AAB61921;
XX
DT   08-MAY-2001  (first entry)
XX
DE   Human BPI protein derived peptide XMP.416.
XX
KW   BPI; antifungal; fungal; mitochondrial; ATP synthase; F1/F0 ATPase;
KW   FMAS; bactericidal permeability increasing protein; preservative;
KW   decontaminant; sterilisation; human.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1..10
FT                   /note= "D-form residues"
FT   Modified-site   1
FT                   /note= "6-amino-octanyl group; NH2-(CH2)7-CO at
FT                         N-terminus"
FT   Modified-site   10
FT                   /note= "C-terminal amide"
XX
PN   WO200104348-A1.
XX
PD   18-JAN-2001.
XX
PF   06-APR-2000; 2000WO-US09252.
XX
PR   12-JUL-1999;   99US-0143372.
XX
PA   (XOMA ) XOMA TECHNOLOGY LTD.
XX
PI   Little RG,  Abrahamson S;
XX
DR   WPI; 2001-138364/14.
XX
PT   Identifying antifungal compounds by targeting the function of fungal
PT   mitochondrial ATP synthase which are useful for treating fungal
PT   infections and as preservative or decontaminant for fluids or surfaces
PT   -
XX
PS   Disclosure; Page 56; 58pp; English.
XX
CC   The invention relates to identifying candidate antifungal compounds by
CC   targeting the function of fungal mitochondrial ATP synthase F1/F0 ATPase
CC   (FMAS). The identified antifungal compounds (bactericidal permeability
CC   increasing protein (BPI)-related products) are useful for treating fungal
CC   infections in animals and plants. They are also suitable for in vitro use
CC   e.g. as a preservative or decontaminant for fluids or surfaces, or use to
CC   sterilize surgical or other medical equipment or implantable devices,
CC   either ex vivo or in situ, including prosthetic joints or indwelling
CC   invasive devices such as intravenous lines or catheters which are often
CC   foci of infection, or use in the preparation of growth media for non-
CC   fungal cells. The present sequence represents a human BPI protein derived
CC   peptide.
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              |:|||||||| |
Db          1 KWLIQLFHKK 10


RESULT 35
AAB68701
ID   AAB68701 standard; Peptide; 10 AA.
XX
AC   AAB68701;
XX
DT   12-APR-2001  (first entry)
XX
DE   Peptide-based construct XMP-365.
XX
KW   Human; antifungal; bactericidal; fungal infection; microbial infection;
KW   bactericidal/permeability-increasing protein; BPI.
XX
OS   Homo sapiens.
XX
PN   WO200130671-A1.
XX
PD   04-JAN-2001.
XX
PF   23-JUN-2000; 2000WO-US17383.
XX
PR   25-JUN-1999;   99US-0344541.
XX
PA   (XOMA ) XOMA TECHNOLOGY LTD.
XX
PI   Little RG,  Lin J,  Gikonyo JGK;
XX
DR   WPI; 2001-122999/13.
XX
PT   Derivatized compounds are peptide-based constructs from Domain III
PT   (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT   useful as antifungal compounds -
XX
PS   Example 1; Page 68; 106pp; English.
XX
CC   The present sequence is a peptide-based construct derived from or based
CC   on subsequences identified and selected from Domain III of
CC   bactericidal/permeability-increasing protein (BPI). It may be used
CC   to treat fungal infections, and for inhibiting growth and replication of
CC   fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC   Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC   Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC   Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC   Malassezia, Actinomyceies, Sporothrix or Penicillium. It is also
CC   useful for treating microbial infections (especially from gram-positive
CC   bacteria).
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              .|||||.||
Db          1 KWLIQLFHKK 10


RESULT 36
AAB68702
ID   AAB68702 standard; Peptide; 10 AA.
XX
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AC   AAB68702;
XX
DT   12-APR-2001  (first entry)
XX
DE   Peptide-based construct XMP-366.
XX
KW   Human; antifungal; bactericidal; fungal infection; microbial infection;
KW   bactericidal/permeability-increasing protein; BPI.
XX
OS   Homo sapiens.
XX
PN   WO200100671-A1.
XX
PD   04-JAN-2001.
XX
PF   23-JUN-2000; 2000WO-US17383.
XX
PR   25-JUN-1999;   99US-0344541.
XX
PA   (XOMA ) XOMA TECHNOLOGY LTD.
XX
PI   Little RG,  Lin J,  Gikonyo JGK;
XX
DR   WPI; 2001-122999/13.
XX
PT   Derivatized compounds are peptide-based constructs from Domain III
PT   (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT   useful as antifungal compounds -
XX
PS   Example 1; Page 69; 106pp; English.
XX
CC   The present sequence is a peptide-based construct derived from or based
CC   on subsequences identified and selected from Domain III of
CC   bactericidal/permeability-increasing protein (BPI). It may be used
CC   to treat fungal infections, and for inhibiting growth and replication of
CC   fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC   Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC   Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC   Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC   Malassezia, Actinomyceles, Sporothrix or Penicillium. It is also
CC   useful for treating microbial infections (especially from gram-positive
CC   bacteria).
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 37
AAB68703
ID   AAB68703 standard; Peptide; 10 AA.
XX
AC   AAB68703;
XX
DT   12-APR-2001  (first entry)
XX
DE   Peptide-based construct XMP-416.
XX
KW   Human; antifungal; bactericidal; fungal infection; microbial infection;
KW   bactericidal/permeability-increasing protein; BPI.
XX
OS   Homo sapiens.
XX
PN   WO200100671-A1.
XX
PD   04-JAN-2001.
XX
PF   23-JUN-2000; 2000WO-US17383.
XX
PR   25-JUN-1999;   99US-0344541.
XX
PA   (XOMA ) XOMA TECHNOLOGY LTD.
XX
PI   Little RG,  Lin J,  Gikonyo JGK;
XX
DR   WPI; 2001-122999/13.
XX
PT   Derivatized compounds are peptide-based constructs from Domain III
PT   (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT   useful as antifungal compounds -
XX
PS   Example 1; Page 69; 106pp; English.
XX
CC   The present sequence is a peptide-based construct derived from or based
CC   on subsequences identified and selected from Domain III of
CC   bactericidal/permeability-increasing protein (BPI). It may be used
CC   to treat fungal infections, and for inhibiting growth and replication of
CC   fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC   Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC   Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC   Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC   Malassezia, Actinomyceles, Sporothrix or Penicillium. It is also
CC   useful for treating microbial infections (especially from gram-positive
CC   bacteria).
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 38
AAB68711
ID   AAB68711 standard; Peptide; 10 AA.
XX
AC   AAB68711;
XX
DT   12-APR-2001  (first entry)
XX
DE   Peptide-based construct XMP-488.
XX
KW   Human; antifungal; bactericidal; fungal infection; microbial infection;
KW   bactericidal/permeability-increasing protein; BPI.
XX
OS   Homo sapiens.
XX
PN   WO200100671-A1.
XX
PD   04-JAN-2001.
XX
PF   23-JUN-2000; 2000WO-US17383.
XX
PR   25-JUN-1999;   99US-0344541.
XX
PA   (XOMA ) XOMA TECHNOLOGY LTD.
XX
PI   Little RG,  Lin J,  Gikonyo JGK;
XX
DR   WPI; 2001-122999/13.
XX
PT   Derivatized compounds are peptide-based constructs from Domain III
PT   (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT   useful as antifungal compounds -
XX
PS   Claim 5; Page 74; 106pp; English.
```

```
XX
CC   The present sequence is a peptide-based construct derived from or based
CC   on subsequences identified and selected from Domain III of
CC   bactericidal/permeability-increasing protein (BPI). It may be used
CC   to treat fungal infections, and for inhibiting growth and replication of
CC   fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC   Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC   Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC   Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC   Malassezia, Actinomyceies, Sporothrix or Penicillium. It is also
CC   useful for treating microbial infections (especially from gram-positive
CC   bacteria).
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 39
AAB68712
ID   AAB68712 standard; Peptide; 10 AA.
XX
AC   AAB68712;
XX
DT   12-APR-2001  (first entry)
XX
DE   Peptide-based construct XMP-489.
XX
KW   Human; antifungal; bactericidal; fungal infection; microbial infection;
KW   bactericidal/permeability-increasing protein; BPI.
XX
OS   Homo sapiens.
XX
PN   WO200100671-A1.
XX
PD   04-JAN-2001.
XX
PF   23-JUN-2000; 2000WO-US17383.
XX
PR   25-JUN-1999;   99US-0344541.
XX
PA   (XOMA ) XOMA TECHNOLOGY LTD.
XX
PI   Little RG,  Lin J,  Gikonyo JGK;
XX
DR   WPI; 2001-122999/13.
XX
PT   Derivatized compounds are peptide-based constructs from Domain III
PT   (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT   useful as antifungal compounds -
XX
PS   Claim 5; Page 74; 106pp; English.
XX
CC   The present sequence is a peptide-based construct derived from or based
CC   on subsequences identified and selected from Domain III of
CC   bactericidal/permeability-increasing protein (BPI). It may be used
CC   to treat fungal infections, and for inhibiting growth and replication of
CC   fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC   Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC   Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC   Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC   Malassezia, Actinomyceies, Sporothrix or Penicillium. It is also
CC   useful for treating microbial infections (especially from gram-positive
CC   bacteria).
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 40
AAB68713
ID   AAB68713 standard; Peptide; 10 AA.
XX
AC   AAB68713;
XX
DT   12-APR-2001  (first entry)
XX
DE   Peptide-based construct XMP-492.
XX
KW   Human; antifungal; bactericidal; fungal infection; microbial infection;
KW   bactericidal/permeability-increasing protein; BPI.
XX
OS   Homo sapiens.
XX
PN   WO200100671-A1.
XX
PD   04-JAN-2001.
XX
PF   23-JUN-2000; 2000WO-US17383.
XX
PR   25-JUN-1999;   99US-0344541.
XX
PA   (XOMA ) XOMA TECHNOLOGY LTD.
XX
PI   Little RG,  Lin J,  Gikonyo JGK;
XX
DR   WPI; 2001-122999/13.
XX
PT   Derivatized compounds are peptide-based constructs from Domain III
PT   (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT   useful as antifungal compounds -
XX
PS   Claim 5; Page 75; 106pp; English.
XX
CC   The present sequence is a peptide-based construct derived from or based
CC   on subsequences identified and selected from Domain III of
CC   bactericidal/permeability-increasing protein (BPI). It may be used
CC   to treat fungal infections, and for inhibiting growth and replication of
CC   fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC   Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC   Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC   Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC   Malassezia, Actinomyceies, Sporothrix or Penicillium. It is also
CC   useful for treating microbial infections (especially from gram-positive
CC   bacteria).
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 41
AAB68714
ID   AAB68714 standard; Peptide; 10 AA.
XX
AC   AAB68714;
XX
```

DT 12-APR-2001 (first entry)
XX
DE Peptide-based construct XMP-493.
XX
KW Human; antifungal; bactericidal; fungal infection; microbial infection;
KW bactericidal/permeability-increasing protein; BPI.
XX
OS Homo sapiens.
XX
PN WO200100671-A1.
XX
PD 04-JAN-2001.
XX
PF 23-JUN-2000; 2000WO-US17383.
XX
PR 25-JUN-1999; 99US-0344541.
XX
PA (XOMA) XOMA TECHNOLOGY LTD.
XX
PI Little RG, Lin J, Gikonyo JGK;
XX
DR WPI; 2001-122999/13.
XX
PT Derivatized compounds are peptide-based constructs from Domain III
PT (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT useful as antifungal compounds -
XX
PS Claim 5; Page 75; 106pp; English.
XX
CC The present sequence is a peptide-based construct derived from or based
CC on subsequences identified and selected from Domain III of
CC bactericidal/permeability-increasing protein (BPI). It may be used
CC to treat fungal infections, and for inhibiting growth and replication of
CC fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC Malassezia, Actinomyceles, Sporothrix or Penicillium. It is also
CC useful for treating microbial infections (especially from gram-positive
CC bacteria).
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 42
AAB68715
ID AAB68715 standard; Peptide; 10 AA.
XX
AC AAB68715;
XX
DT 12-APR-2001 (first entry)
XX
DE Peptide-based construct XMP-496.
XX
KW Human; antifungal; bactericidal; fungal infection; microbial infection;
KW bactericidal/permeability-increasing protein; BPI.
XX
OS Homo sapiens.
XX
PN WO200100671-A1.
XX
PD 04-JAN-2001.
XX
PF 23-JUN-2000; 2000WO-US17383.
XX
PR 25-JUN-1999; 99US-0344541.
XX
PA (XOMA) XOMA TECHNOLOGY LTD.
XX
PI Little RG, Lin J, Gikonyo JGK;
XX
DR WPI; 2001-122999/13.
XX
PT Derivatized compounds are peptide-based constructs from Domain III
PT (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT useful as antifungal compounds -
XX
PS Claim 5; Page 76; 106pp; English.
XX
CC The present sequence is a peptide-based construct derived from or based
CC on subsequences identified and selected from Domain III of
CC bactericidal/permeability-increasing protein (BPI). It may be used
CC to treat fungal infections, and for inhibiting growth and replication of
CC fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC Malassezia, Actinomyceles, Sporothrix or Penicillium. It is also
CC useful for treating microbial infections (especially from gram-positive
CC bacteria).
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 43
AAB68716
ID AAB68716 standard; Peptide; 10 AA.
XX
AC AAB68716;
XX
DT 12-APR-2001 (first entry)
XX
DE Peptide-based construct XMP-499.
XX
KW Human; antifungal; bactericidal; fungal infection; microbial infection;
KW bactericidal/permeability-increasing protein; BPI.
XX
OS Homo sapiens.
XX
PN WO200100671-A1.
XX
PD 04-JAN-2001.
XX
PF 23-JUN-2000; 2000WO-US17383.
XX
PR 25-JUN-1999; 99US-0344541.
XX
PA (XOMA) XOMA TECHNOLOGY LTD.
XX
PI Little RG, Lin J, Gikonyo JGK;
XX
DR WPI; 2001-122999/13.
XX
PT Derivatized compounds are peptide-based constructs from Domain III
PT (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT useful as antifungal compounds -
XX
PS Claim 5; Page 76; 106pp; English.
XX
CC The present sequence is a peptide-based construct derived from or based

```
CC   on subsequences identified and selected from Domain III of
CC   bactericidal/permeability-increasing protein (BPI). It may be used
CC   to treat fungal infections, and for inhibiting growth and replication of
CC   fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC   Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC   Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC   Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC   Malassezia, Actinomyceles, Sporothrix or Penicillium. It is also
CC   useful for treating microbial infections (especially from gram-positive
CC   bacteria).
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 44
AAB68717
ID   AAB68717 standard; Peptide; 10 AA.
XX
AC   AAB68717;
XX
DT   12-APR-2001  (first entry)
XX
DE   Peptide-based construct XMP-500.
XX
KW   Human; antifungal; bactericidal; fungal infection; microbial infection;
KW   bactericidal/permeability-increasing protein; BPI.
XX
OS   Homo sapiens.
XX
PN   WO200100671-A1.
XX
PD   04-JAN-2001.
XX
PF   23-JUN-2000; 2000WO-US17383.
XX
PR   25-JUN-1999;   99US-0344541.
XX
PA   (XOMA ) XOMA TECHNOLOGY LTD.
XX
PI   Little RG,  Lin J,  Gikonyo JGK;
XX
DR   WPI; 2001-122999/13.
XX
PT   Derivatized compounds are peptide-based constructs from Domain III
PT   (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT   useful as antifungal compounds -
XX
PS   Claim 5; Page 77; 106pp; English.
XX
CC   The present sequence is a peptide-based construct derived from or based
CC   on subsequences identified and selected from Domain III of
CC   bactericidal/permeability-increasing protein (BPI). It may be used
CC   to treat fungal infections, and for inhibiting growth and replication of
CC   fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC   Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC   Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC   Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC   Malassezia, Actinomyceles, Sporothrix or Penicillium. It is also
CC   useful for treating microbial infections (especially from gram-positive
CC   bacteria).
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 45
AAB68718
ID   AAB68718 standard; Peptide; 10 AA.
XX
AC   AAB68718;
XX
DT   12-APR-2001  (first entry)
XX
DE   Peptide-based construct XMP-501.
XX
KW   Human; antifungal; bactericidal; fungal infection; microbial infection;
KW   bactericidal/permeability-increasing protein; BPI.
XX
OS   Homo sapiens.
XX
PN   WO200100671-A1.
XX
PD   04-JAN-2001.
XX
PF   23-JUN-2000; 2000WO-US17383.
XX
PR   25-JUN-1999;   99US-0344541.
XX
PA   (XOMA ) XOMA TECHNOLOGY LTD.
XX
PI   Little RG,  Lin J,  Gikonyo JGK;
XX
DR   WPI; 2001-122999/13.
XX
PT   Derivatized compounds are peptide-based constructs from Domain III
PT   (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT   useful as antifungal compounds -
XX
PS   Claim 5; Page 77; 106pp; English.
XX
CC   The present sequence is a peptide-based construct derived from or based
CC   on subsequences identified and selected from Domain III of
CC   bactericidal/permeability-increasing protein (BPI). It may be used
CC   to treat fungal infections, and for inhibiting growth and replication of
CC   fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC   Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC   Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC   Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC   Malassezia, Actinomyceles, Sporothrix or Penicillium. It is also
CC   useful for treating microbial infections (especially from gram-positive
CC   bacteria).
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 46
AAB68719
ID   AAB68719 standard; Peptide; 10 AA.
XX
AC   AAB68719;
XX
DT   12-APR-2001  (first entry)
XX
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DE Peptide-based construct XMP-502.
XX
KW Human; antifungal; bactericidal; fungal infection; microbial infection;
KW bactericidal/permeability-increasing protein; BPI.
XX
OS Homo sapiens.
XX
PN WO200100671-A1.
XX
PD 04-JAN-2001.
XX
PF 23-JUN-2000; 2000WO-US17383.
XX
PR 25-JUN-1999; 99US-0344541.
XX
PA (XOMA) XOMA TECHNOLOGY LTD.
XX
PI Little RG, Lin J, Gikonyo JGK;
XX
DR WPI; 2001-122999/13.
XX
PT Derivatized compounds are peptide-based constructs from Domain III
PT (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT useful as antifungal compounds -
XX
PS Claim 5; Page 78; 106pp; English.
XX
CC The present sequence is a peptide-based construct derived from or based
CC on subsequences identified and selected from Domain III of
CC bactericidal/permeability-increasing protein (BPI). It may be used
CC to treat fungal infections, and for inhibiting growth and replication of
CC fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC Malassezia, Actinomyceies, Sporothrix or Penicillium. It is also
CC useful for treating microbial infections (especially from gram-positive
CC bacteria).
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 47
AAB68720
ID AAB68720 standard; Peptide; 10 AA.
XX
AC AAB68720;
XX
DT 12-APR-2001 (first entry)
XX
DE Peptide-based construct XMP-503.
XX
KW Human; antifungal; bactericidal; fungal infection; microbial infection;
KW bactericidal/permeability-increasing protein; BPI.
XX
OS Homo sapiens.
XX
PN WO200100671-A1.
XX
PD 04-JAN-2001.
XX
PF 23-JUN-2000; 2000WO-US17383.
XX
PR 25-JUN-1999; 99US-0344541.
XX
PA (XOMA) XOMA TECHNOLOGY LTD.
XX
PI Little RG, Lin J, Gikonyo JGK;
XX
DR WPI; 2001-122999/13.
XX
PT Derivatized compounds are peptide-based constructs from Domain III
PT (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT useful as antifungal compounds -
XX
PS Claim 5; Page 78; 106pp; English.
XX
CC The present sequence is a peptide-based construct derived from or based
CC on subsequences identified and selected from Domain III of
CC bactericidal/permeability-increasing protein (BPI). It may be used
CC to treat fungal infections, and for inhibiting growth and replication of
CC fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC Malassezia, Actinomyceies, Sporothrix or Penicillium. It is also
CC useful for treating microbial infections (especially from gram-positive
CC bacteria).
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 48
AAB68721
ID AAB68721 standard; Peptide; 10 AA.
XX
AC AAB68721;
XX
DT 12-APR-2001 (first entry)
XX
DE Peptide-based construct XMP-504.
XX
KW Human; antifungal; bactericidal; fungal infection; microbial infection;
KW bactericidal/permeability-increasing protein; BPI.
XX
OS Homo sapiens.
XX
PN WO200100671-A1.
XX
PD 04-JAN-2001.
XX
PF 23-JUN-2000; 2000WO-US17383.
XX
PR 25-JUN-1999; 99US-0344541.
XX
PA (XOMA) XOMA TECHNOLOGY LTD.
XX
PI Little RG, Lin J, Gikonyo JGK;
XX
DR WPI; 2001-122999/13.
XX
PT Derivatized compounds are peptide-based constructs from Domain III
PT (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT useful as antifungal compounds -
XX
PS Claim 5; Page 79; 106pp; English.
XX
CC The present sequence is a peptide-based construct derived from or based
CC on subsequences identified and selected from Domain III of
CC bactericidal/permeability-increasing protein (BPI). It may be used

```
CC   to treat fungal infections, and for inhibiting growth and replication of
CC   fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC   Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC   Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC   Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC   Malassezia, Actinomyceies, Sporothrix or Penicillium. It is also
CC   useful for treating microbial infections (especially from gram-positive
CC   bacteria).
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 49
AAB68722
ID   AAB68722 standard; Peptide; 10 AA.
XX
AC   AAB68722;
XX
DT   12-APR-2001  (first entry)
XX
DE   Peptide-based construct XMP-516.
XX
KW   Human; antifungal; bactericidal; fungal infection; microbial infection;
KW   bactericidal/permeability-increasing protein; BPI.
XX
OS   Homo sapiens.
XX
PN   WO200100671-A1.
XX
PD   04-JAN-2001.
XX
PF   23-JUN-2000; 2000WO-US17383.
XX
PR   25-JUN-1999;   99US-0344541.
XX
PA   (XOMA ) XOMA TECHNOLOGY LTD.
XX
PI   Little RG,  Lin J,  Gikonyo JGK;
XX
DR   WPI; 2001-122999/13.
XX
PT   Derivatized compounds are peptide-based constructs from Domain III
PT   (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT   useful as antifungal compounds -
XX
PS   Claim 5; Page 79; 106pp; English.
XX
CC   The present sequence is a peptide-based construct derived from or based
CC   on subsequences identified and selected from Domain III of
CC   bactericidal/permeability-increasing protein (BPI). It may be used
CC   to treat fungal infections, and for inhibiting growth and replication of
CC   fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC   Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC   Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC   Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC   Malassezia, Actinomyceies, Sporothrix or Penicillium. It is also
CC   useful for treating microbial infections (especially from gram-positive
CC   bacteria).
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 50
AAB68723
ID   AAB68723 standard; Peptide; 10 AA.
XX
AC   AAB68723;
XX
DT   12-APR-2001  (first entry)
XX
DE   Peptide-based construct XMP-517.
XX
KW   Human; antifungal; bactericidal; fungal infection; microbial infection;
KW   bactericidal/permeability-increasing protein; BPI.
XX
OS   Homo sapiens.
XX
PN   WO200100671-A1.
XX
PD   04-JAN-2001.
XX
PF   23-JUN-2000; 2000WO-US17383.
XX
PR   25-JUN-1999;   99US-0344541.
XX
PA   (XOMA ) XOMA TECHNOLOGY LTD.
XX
PI   Little RG,  Lin J,  Gikonyo JGK;
XX
DR   WPI; 2001-122999/13.
XX
PT   Derivatized compounds are peptide-based constructs from Domain III
PT   (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT   useful as antifungal compounds -
XX
PS   Claim 5; Page 80; 106pp; English.
XX
CC   The present sequence is a peptide-based construct derived from or based
CC   on subsequences identified and selected from Domain III of
CC   bactericidal/permeability-increasing protein (BPI). It may be used
CC   to treat fungal infections, and for inhibiting growth and replication of
CC   fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC   Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC   Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC   Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC   Malassezia, Actinomyceies, Sporothrix or Penicillium. It is also
CC   useful for treating microbial infections (especially from gram-positive
CC   bacteria).
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 51
AAB68724
ID   AAB68724 standard; Peptide; 10 AA.
XX
AC   AAB68724;
XX
DT   12-APR-2001  (first entry)
XX
DE   Peptide-based construct XMP-518.
XX
```

KW Human; antifungal; bactericidal; fungal infection; microbial infection;
KW bactericidal/permeability-increasing protein; BPI.
XX
OS Homo sapiens.
XX
PN WO200100671-A1.
XX
PD 04-JAN-2001.
XX
PF 23-JUN-2000; 2000WO-US17383.
XX
PR 25-JUN-1999; 99US-0344541.
XX
PA (XOMA) XOMA TECHNOLOGY LTD.
XX
PI Little RG, Lin J, Gikonyo JGK;
XX
DR WPI; 2001-122999/13.
XX
PT Derivatized compounds are peptide-based constructs from Domain III
PT (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT useful as antifungal compounds -
XX
PS Claim 5; Page 80; 106pp; English.
XX
CC The present sequence is a peptide-based construct derived from or based
CC on subsequences identified and selected from Domain III of
CC bactericidal/permeability-increasing protein (BPI). It may be used
CC to treat fungal infections, and for inhibiting growth and replication of
CC fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC Malassezia, Actinomyceies, Sporothrix or Penicillium. It is also
CC useful for treating microbial infections (especially from gram-positive
CC bacteria).
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 52
AAB68725
ID AAB68725 standard; Peptide; 10 AA.
XX
AC AAB68725;
XX
DT 12-APR-2001 (first entry)
XX
DE Peptide-based construct XMP-519.
XX
KW Human; antifungal; bactericidal; fungal infection; microbial infection;
KW bactericidal/permeability-increasing protein; BPI.
XX
OS Homo sapiens.
XX
PN WO200100671-A1.
XX
PD 04-JAN-2001.
XX
PF 23-JUN-2000; 2000WO-US17383.
XX
PR 25-JUN-1999; 99US-0344541.
XX
PA (XOMA) XOMA TECHNOLOGY LTD.
XX
PI Little RG, Lin J, Gikonyo JGK;
XX
DR WPI; 2001-122999/13.
XX
PT Derivatized compounds are peptide-based constructs from Domain III
PT (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT useful as antifungal compounds -
XX
PS Claim 5; Page 81; 106pp; English.
XX
CC The present sequence is a peptide-based construct derived from or based
CC on subsequences identified and selected from Domain III of
CC bactericidal/permeability-increasing protein (BPI). It may be used
CC to treat fungal infections, and for inhibiting growth and replication of
CC fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC Malassezia, Actinomyceies, Sporothrix or Penicillium. It is also
CC useful for treating microbial infections (especially from gram-positive
CC bacteria).
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 53
AAB68726
ID AAB68726 standard; Peptide; 10 AA.
XX
AC AAB68726;
XX
DT 12-APR-2001 (first entry)
XX
DE Peptide-based construct XMP-520.
XX
KW Human; antifungal; bactericidal; fungal infection; microbial infection;
KW bactericidal/permeability-increasing protein; BPI.
XX
OS Homo sapiens.
XX
PN WO200100671-A1.
XX
PD 04-JAN-2001.
XX
PF 23-JUN-2000; 2000WO-US17383.
XX
PR 25-JUN-1999; 99US-0344541.
XX
PA (XOMA) XOMA TECHNOLOGY LTD.
XX
PI Little RG, Lin J, Gikonyo JGK;
XX
DR WPI; 2001-122999/13.
XX
PT Derivatized compounds are peptide-based constructs from Domain III
PT (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT useful as antifungal compounds -
XX
PS Claim 5; Page 81; 106pp; English.
XX
CC The present sequence is a peptide-based construct derived from or based
CC on subsequences identified and selected from Domain III of
CC bactericidal/permeability-increasing protein (BPI). It may be used
CC to treat fungal infections, and for inhibiting growth and replication of
CC fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,

```
CC   Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC   Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC   Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC   Malassezia, Actinomyceies, Sporothrix or Penicillium. It is also
CC   useful for treating microbial infections (especially from gram-positive
CC   bacteria).
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||| |||| 
Db          1 KWLIQLFHKK 10


RESULT 54
AAB68727
ID   AAB68727 standard; Peptide; 10 AA.
XX
AC   AAB68727;
XX
DT   12-APR-2001  (first entry)
XX
DE   Peptide-based construct XMP-521.
XX
KW   Human; antifungal; bactericidal; fungal infection; microbial infection;
KW   bactericidal/permeability-increasing protein; BPI.
XX
OS   Homo sapiens.
XX
PN   WO200100671-A1.
XX
PD   04-JAN-2001.
XX
PF   23-JUN-2000; 2000WO-US17383.
XX
PR   25-JUN-1999;   99US-0344541.
XX
PA   (XOMA ) XOMA TECHNOLOGY LTD.
XX
PI   Little RG,  Lin J,  Gikonyo JGK;
XX
DR   WPI; 2001-122999/13.
XX
PT   Derivatized compounds are peptide-based constructs from Domain III
PT   (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT   useful as antifungal compounds -
XX
PS   Claim 5; Page 82; 106pp; English.
XX
CC   The present sequence is a peptide-based construct derived from or based
CC   on subsequences identified and selected from Domain III of
CC   bactericidal/permeability-increasing protein (BPI). It may be used
CC   to treat fungal infections, and for inhibiting growth and replication of
CC   fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC   Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC   Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC   Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC   Malassezia, Actinomyceies, Sporothrix or Penicillium. It is also
CC   useful for treating microbial infections (especially from gram-positive
CC   bacteria).
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 55
AAB68728
ID   AAB68728 standard; Peptide; 10 AA.
XX
AC   AAB68728;
XX
DT   12-APR-2001  (first entry)
XX
DE   Peptide-based construct XMP-522.
XX
KW   Human; antifungal; bactericidal; fungal infection; microbial infection;
KW   bactericidal/permeability-increasing protein; BPI.
XX
OS   Homo sapiens.
XX
PN   WO200100671-A1.
XX
PD   04-JAN-2001.
XX
PF   23-JUN-2000; 2000WO-US17383.
XX
PR   25-JUN-1999;   99US-0344541.
XX
PA   (XOMA ) XOMA TECHNOLOGY LTD.
XX
PI   Little RG,  Lin J,  Gikonyo JGK;
XX
DR   WPI; 2001-122999/13.
XX
PT   Derivatized compounds are peptide-based constructs from Domain III
PT   (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT   useful as antifungal compounds -
XX
PS   Claim 5; Page 83; 106pp; English.
XX
CC   The present sequence is a peptide-based construct derived from or based
CC   on subsequences identified and selected from Domain III of
CC   bactericidal/permeability-increasing protein (BPI). It may be used
CC   to treat fungal infections, and for inhibiting growth and replication of
CC   fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC   Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC   Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC   Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC   Malassezia, Actinomyceies, Sporothrix or Penicillium. It is also
CC   useful for treating microbial infections (especially from gram-positive
CC   bacteria).
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 56
AAB68729
ID   AAB68729 standard; Peptide; 10 AA.
XX
AC   AAB68729;
XX
DT   12-APR-2001  (first entry)
XX
DE   Peptide-based construct XMP-523.
XX
KW   Human; antifungal; bactericidal; fungal infection; microbial infection;
KW   bactericidal/permeability-increasing protein; BPI.
```

XX
OS Homo sapiens.
XX
PN WO200100671-A1.
XX
PD 04-JAN-2001.
XX
PF 23-JUN-2000; 2000WO-US17383.
XX
PR 25-JUN-1999; 99US-0344541.
XX
PA (XOMA) XOMA TECHNOLOGY LTD.
XX
PI Little RG, Lin J, Gikonyo JGK;
XX
DR WPI; 2001-122999/13.
XX
PT Derivatized compounds are peptide-based constructs from Domain III
PT (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT useful as antifungal compounds -
XX
PS Claim 5; Page 83; 106pp; English.
XX
CC The present sequence is a peptide-based construct derived from or based
CC on subsequences identified and selected from Domain III of
CC bactericidal/permeability-increasing protein (BPI). It may be used
CC to treat fungal infections, and for inhibiting growth and replication of
CC fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC Malassezia, Actinomyceles, Sporothrix or Penicillium. It is also
CC useful for treating microbial infections (especially from gram-positive
CC bacteria).
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 57
AAB68730
ID AAB68730 standard; Peptide; 10 AA.
XX
AC AAB68730;
XX
DT 12-APR-2001 (first entry)
XX
DE Peptide-based construct XMP-524.
XX
KW Human; antifungal; bactericidal; fungal infection; microbial infection;
KW bactericidal/permeability-increasing protein; BPI.
XX
OS Homo sapiens.
XX
PN WO200100671-A1.
XX
PD 04-JAN-2001.
XX
PF 23-JUN-2000; 2000WO-US17383.
XX
PR 25-JUN-1999; 99US-0344541.
XX
PA (XOMA) XOMA TECHNOLOGY LTD.
XX
PI Little RG, Lin J, Gikonyo JGK;
XX
DR WPI; 2001-122999/13.
XX
PT Derivatized compounds are peptide-based constructs from Domain III
PT (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT useful as antifungal compounds -
XX
PS Claim 5; Page 84; 106pp; English.
XX
CC The present sequence is a peptide-based construct derived from or based
CC on subsequences identified and selected from Domain III of
CC bactericidal/permeability-increasing protein (BPI). It may be used
CC to treat fungal infections, and for inhibiting growth and replication of
CC fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC Malassezia, Actinomyceles, Sporothrix or Penicillium. It is also
CC useful for treating microbial infections (especially from gram-positive
CC bacteria).
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 58
AAB68731
ID AAB68731 standard; Peptide; 10 AA.
XX
AC AAB68731;
XX
DT 12-APR-2001 (first entry)
XX
DE Peptide-based construct XMP-525.
XX
KW Human; antifungal; bactericidal; fungal infection; microbial infection;
KW bactericidal/permeability-increasing protein; BPI.
XX
OS Homo sapiens.
XX
PN WO200100671-A1.
XX
PD 04-JAN-2001.
XX
PF 23-JUN-2000; 2000WO-US17383.
XX
PR 25-JUN-1999; 99US-0344541.
XX
PA (XOMA) XOMA TECHNOLOGY LTD.
XX
PI Little RG, Lin J, Gikonyo JGK;
XX
DR WPI; 2001-122999/13.
XX
PT Derivatized compounds are peptide-based constructs from Domain III
PT (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT useful as antifungal compounds -
XX
PS Claim 5; Page 84; 106pp; English.
XX
CC The present sequence is a peptide-based construct derived from or based
CC on subsequences identified and selected from Domain III of
CC bactericidal/permeability-increasing protein (BPI). It may be used
CC to treat fungal infections, and for inhibiting growth and replication of
CC fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,

```
CC   Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC   Malassezia, Actinomyceies, Sporothrix or Penicillium. It is also
CC   useful for treating microbial infections (especially from gram-positive
CC   bacteria).
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 59
AAB68732
ID   AAB68732 standard; Peptide; 10 AA.
XX
AC   AAB68732;
XX
DT   12-APR-2001  (first entry)
XX
DE   Peptide-based construct XMP-526.
XX
KW   Human; antifungal; bactericidal; fungal infection; microbial infection;
KW   bactericidal/permeability-increasing protein; BPI.
XX
OS   Homo sapiens.
XX
PN   WO200100671-A1.
XX
PD   04-JAN-2001.
XX
PF   23-JUN-2000; 2000WO-US17383.
XX
PR   25-JUN-1999;   99US-0344541.
XX
PA   (XOMA ) XOMA TECHNOLOGY LTD.
XX
PI   Little RG,  Lin J,  Gikonyo JGK;
XX
DR   WPI; 2001-122999/13.
XX
PT   Derivatized compounds are peptide-based constructs from Domain III
PT   (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT   useful as antifungal compounds -
XX
PS   Claim 5; Page 85; 106pp; English.
XX
CC   The present sequence is a peptide-based construct derived from or based
CC   on subsequences identified and selected from Domain III of
CC   bactericidal/permeability-increasing protein (BPI). It may be used
CC   to treat fungal infections, and for inhibiting growth and replication of
CC   fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC   Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC   Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC   Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC   Malassezia, Actinomyceies, Sporothrix or Penicillium. It is also
CC   useful for treating microbial infections (especially from gram-positive
CC   bacteria).
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 60
AAB68733
ID   AAB68733 standard; Peptide; 10 AA.
XX
AC   AAB68733;
XX
DT   12-APR-2001  (first entry)
XX
DE   Peptide-based construct XMP-527.
XX
KW   Human; antifungal; bactericidal; fungal infection; microbial infection;
KW   bactericidal/permeability-increasing protein; BPI.
XX
OS   Homo sapiens.
XX
PN   WO200100671-A1.
XX
PD   04-JAN-2001.
XX
PF   23-JUN-2000; 2000WO-US17383.
XX
PR   25-JUN-1999;   99US-0344541.
XX
PA   (XOMA ) XOMA TECHNOLOGY LTD.
XX
PI   Little RG,  Lin J,  Gikonyo JGK;
XX
DR   WPI; 2001-122999/13.
XX
PT   Derivatized compounds are peptide-based constructs from Domain III
PT   (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT   useful as antifungal compounds -
XX
PS   Claim 5; Page 86; 106pp; English.
XX
CC   The present sequence is a peptide-based construct derived from or based
CC   on subsequences identified and selected from Domain III of
CC   bactericidal/permeability-increasing protein (BPI). It may be used
CC   to treat fungal infections, and for inhibiting growth and replication of
CC   fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC   Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC   Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC   Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC   Malassezia, Actinomyceies, Sporothrix or Penicillium. It is also
CC   useful for treating microbial infections (especially from gram-positive
CC   bacteria).
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||| |||||||
Db          1 KWLIQLFHKK 10


RESULT 61
AAB68735
ID   AAB68735 standard; Peptide; 10 AA.
XX
AC   AAB68735;
XX
DT   12-APR-2001  (first entry)
XX
DE   Peptide-based construct XMP-533.
XX
KW   Human; antifungal; bactericidal; fungal infection; microbial infection;
KW   bactericidal/permeability-increasing protein; BPI.
XX
OS   Homo sapiens.
```

```
XX
PN   WO200100671-A1.
XX
PD   04-JAN-2001.
XX
PF   23-JUN-2000; 2000WO-US17383.
XX
PR   25-JUN-1999;   99US-0344541.
XX
PA   (XOMA ) XOMA TECHNOLOGY LTD.
XX
PI   Little RG,  Lin J,  Gikonyo JGK;
XX
DR   WPI; 2001-122999/13.
XX
PT   Derivatized compounds are peptide-based constructs from Domain III
PT   (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT   useful as antifungal compounds -
XX
PS   Claim 5; Page 87; 106pp; English.
XX
CC   The present sequence is a peptide-based construct derived from or based
CC   on subsequences identified and selected from Domain III of
CC   bactericidal/permeability-increasing protein (BPI). It may be used
CC   to treat fungal infections, and for inhibiting growth and replication of
CC   fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC   Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC   Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC   Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC   Malassezia, Actinomyceies, Sporothrix or Penicillium. It is also
CC   useful for treating microbial infections (especially from gram-positive
CC   bacteria).
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 62
AAB68736
ID   AAB68736 standard; Peptide; 10 AA.
XX
AC   AAB68736;
XX
DT   12-APR-2001  (first entry)
XX
DE   Peptide-based construct XMP-534.
XX
KW   Human; antifungal; bactericidal; fungal infection; microbial infection;
KW   bactericidal/permeability-increasing protein; BPI.
XX
OS   Homo sapiens.
XX
PN   WO200100671-A1.
XX
PD   04-JAN-2001.
XX
PF   23-JUN-2000; 2000WO-US17383.
XX
PR   25-JUN-1999;   99US-0344541.
XX
PA   (XOMA ) XOMA TECHNOLOGY LTD.
XX
PI   Little RG,  Lin J,  Gikonyo JGK;
XX
DR   WPI; 2001-122999/13.
XX
PT   Derivatized compounds are peptide-based constructs from Domain III
PT   (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT   useful as antifungal compounds -
XX
PS   Claim 5; Page 87; 106pp; English.
XX
CC   The present sequence is a peptide-based construct derived from or based
CC   on subsequences identified and selected from Domain III of
CC   bactericidal/permeability-increasing protein (BPI). It may be used
CC   to treat fungal infections, and for inhibiting growth and replication of
CC   fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC   Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC   Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC   Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC   Malassezia, Actinomyceies, Sporothrix or Penicillium. It is also
CC   useful for treating microbial infections (especially from gram-positive
CC   bacteria).
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 63
AAB68737
ID   AAB68737 standard; Peptide; 10 AA.
XX
AC   AAB68737;
XX
DT   12-APR-2001  (first entry)
XX
DE   Peptide-based construct XMP-535.
XX
KW   Human; antifungal; bactericidal; fungal infection; microbial infection;
KW   bactericidal/permeability-increasing protein; BPI.
XX
OS   Homo sapiens.
XX
PN   WO200100671-A1.
XX
PD   04-JAN-2001.
XX
PF   23-JUN-2000; 2000WO-US17383.
XX
PR   25-JUN-1999;   99US-0344541.
XX
PA   (XOMA ) XOMA TECHNOLOGY LTD.
XX
PI   Little RG,  Lin J,  Gikonyo JGK;
XX
DR   WPI; 2001-122999/13.
XX
PT   Derivatized compounds are peptide-based constructs from Domain III
PT   (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT   useful as antifungal compounds -
XX
PS   Claim 5; Page 88; 106pp; English.
XX
CC   The present sequence is a peptide-based construct derived from or based
CC   on subsequences identified and selected from Domain III of
CC   bactericidal/permeability-increasing protein (BPI). It may be used
CC   to treat fungal infections, and for inhibiting growth and replication of
CC   fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC   Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC   Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC   Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC   Malassezia, Actinomyceies, Sporothrix or Penicillium. It is also
```

```
CC   useful for treating microbial infections (especially from gram-positive
CC   bacteria).
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 64
AAB68738
ID   AAB68738 standard; Peptide; 10 AA.
XX
AC   AAB68738;
XX
DT   12-APR-2001  (first entry)
XX
DE   Peptide-based construct XMP-536.
XX
KW   Human; antifungal; bactericidal; fungal infection; microbial infection;
KW   bactericidal/permeability-increasing protein; BPI.
XX
OS   Homo sapiens.
XX
PN   WO200100671-A1.
XX
PD   04-JAN-2001.
XX
PF   23-JUN-2000; 2000WO-US17383.
XX
PR   25-JUN-1999;   99US-0344541.
XX
PA   (XOMA ) XOMA TECHNOLOGY LTD.
XX
PI   Little RG,  Lin J,  Gikonyo JGK;
XX
DR   WPI; 2001-122999/13.
XX
PT   Derivatized compounds are peptide-based constructs from Domain III
PT   (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT   useful as antifungal compounds -
XX
PS   Claim 5; Page 88; 106pp; English.
XX
CC   The present sequence is a peptide-based construct derived from or based
CC   on subsequences identified and selected from Domain III of
CC   bactericidal/permeability-increasing protein (BPI). It may be used
CC   to treat fungal infections, and for inhibiting growth and replication of
CC   fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC   Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC   Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC   Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC   Malassezia, Actinomyceles, Sporothrix or Penicillium. It is also
CC   useful for treating microbial infections (especially from gram-positive
CC   bacteria).
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 65
AAB68739
ID   AAB68739 standard; Peptide; 10 AA.
XX
AC   AAB68739;
XX
DT   12-APR-2001  (first entry)
XX
DE   Peptide-based construct XMP-545.
XX
KW   Human; antifungal; bactericidal; fungal infection; microbial infection;
KW   bactericidal/permeability-increasing protein; BPI.
XX
OS   Homo sapiens.
XX
PN   WO200100671-A1.
XX
PD   04-JAN-2001.
XX
PF   23-JUN-2000; 2000WO-US17383.
XX
PR   25-JUN-1999;   99US-0344541.
XX
PA   (XOMA ) XOMA TECHNOLOGY LTD.
XX
PI   Little RG,  Lin J,  Gikonyo JGK;
XX
DR   WPI; 2001-122999/13.
XX
PT   Derivatized compounds are peptide-based constructs from Domain III
PT   (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT   useful as antifungal compounds -
XX
PS   Claim 5; Page 89; 106pp; English.
XX
CC   The present sequence is a peptide-based construct derived from or based
CC   on subsequences identified and selected from Domain III of
CC   bactericidal/permeability-increasing protein (BPI). It may be used
CC   to treat fungal infections, and for inhibiting growth and replication of
CC   fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC   Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC   Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC   Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC   Malassezia, Actinomyceles, Sporothrix or Penicillium. It is also
CC   useful for treating microbial infections (especially from gram-positive
CC   bacteria).
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 66
AAB68740
ID   AAB68740 standard; Peptide; 10 AA.
XX
AC   AAB68740;
XX
DT   12-APR-2001  (first entry)
XX
DE   Peptide-based construct XMP-546.
XX
KW   Human; antifungal; bactericidal; fungal infection; microbial infection;
KW   bactericidal/permeability-increasing protein; BPI.
XX
OS   Homo sapiens.
XX
PN   WO200100671-A1.
```

XX
PD 04-JAN-2001.
XX
PF 23-JUN-2000; 2000WO-US17383.
XX
PR 25-JUN-1999; 99US-0344541.
XX
PA (XOMA) XOMA TECHNOLOGY LTD.
XX
PI Little RG, Lin J, Gikonyo JGK;
XX
DR WPI; 2001-122999/13.
XX
PT Derivatized compounds are peptide-based constructs from Domain III
PT (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT useful as antifungal compounds -
XX
PS Claim 5; Page 89; 106pp; English.
XX
CC The present sequence is a peptide-based construct derived from or based
CC on subsequences identified and selected from Domain III of
CC bactericidal/permeability-increasing protein (BPI). It may be used
CC to treat fungal infections, and for inhibiting growth and replication of
CC fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC Malassezia, Actinomyceies, Sporothrix or Penicillium. It is also
CC useful for treating microbial infections (especially from gram-positive
CC bacteria).
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 67
AAB68741
ID AAB68741 standard; Peptide; 10 AA.
XX
AC AAB68741;
XX
DT 12-APR-2001 (first entry)
XX
DE Peptide-based construct XMP-560.
XX
KW Human; antifungal; bactericidal; fungal infection; microbial infection;
KW bactericidal/permeability-increasing protein; BPI.
XX
OS Homo sapiens.
XX
PN WO200100671-A1.
XX
PD 04-JAN-2001.
XX
PF 23-JUN-2000; 2000WO-US17383.
XX
PR 25-JUN-1999; 99US-0344541.
XX
PA (XOMA) XOMA TECHNOLOGY LTD.
XX
PI Little RG, Lin J, Gikonyo JGK;
XX
DR WPI; 2001-122999/13.
XX
PT Derivatized compounds are peptide-based constructs from Domain III
PT (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT useful as antifungal compounds -
XX
PS Claim 5; Page 90; 106pp; English.
XX
CC The present sequence is a peptide-based construct derived from or based
CC on subsequences identified and selected from Domain III of
CC bactericidal/permeability-increasing protein (BPI). It may be used
CC to treat fungal infections, and for inhibiting growth and replication of
CC fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC Malassezia, Actinomyceies, Sporothrix or Penicillium. It is also
CC useful for treating microbial infections (especially from gram-positive
CC bacteria).
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 68
AAB68743
ID AAB68743 standard; Peptide; 10 AA.
XX
AC AAB68743;
XX
DT 12-APR-2001 (first entry)
XX
DE Peptide-based construct XMP-596.
XX
KW Human; antifungal; bactericidal; fungal infection; microbial infection;
KW bactericidal/permeability-increasing protein; BPI.
XX
OS Homo sapiens.
XX
PN WO200100671-A1.
XX
PD 04-JAN-2001.
XX
PF 23-JUN-2000; 2000WO-US17383.
XX
PR 25-JUN-1999; 99US-0344541.
XX
PA (XOMA) XOMA TECHNOLOGY LTD.
XX
PI Little RG, Lin J, Gikonyo JGK;
XX
DR WPI; 2001-122999/13.
XX
PT Derivatized compounds are peptide-based constructs from Domain III
PT (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT useful as antifungal compounds -
XX
PS Claim 5; Page 91; 106pp; English.
XX
CC The present sequence is a peptide-based construct derived from or based
CC on subsequences identified and selected from Domain III of
CC bactericidal/permeability-increasing protein (BPI). It may be used
CC to treat fungal infections, and for inhibiting growth and replication of
CC fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC Malassezia, Actinomyceies, Sporothrix or Penicillium. It is also
CC useful for treating microbial infections (especially from gram-positive
CC bacteria).

```
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 69
AAB68748
ID   AAB68748 standard; Peptide; 10 AA.
XX
AC   AAB68748;
XX
DT   12-APR-2001  (first entry)
XX
DE   Peptide-based construct XMP-618.
XX
KW   Human; antifungal; bactericidal; fungal infection; microbial infection;
KW   bactericidal/permeability-increasing protein; BPI.
XX
OS   Homo sapiens.
XX
PN   WO200100671-A1.
XX
PD   04-JAN-2001.
XX
PF   23-JUN-2000; 2000WO-US17383.
XX
PR   25-JUN-1999;   99US-0344541.
XX
PA   (XOMA ) XOMA TECHNOLOGY LTD.
XX
PI   Little RG,  Lin J,  Gikonyo JGK;
XX
DR   WPI; 2001-122999/13.
XX
PT   Derivatized compounds are peptide-based constructs from Domain III
PT   (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT   useful as antifungal compounds -
XX
PS   Claim 5; Page 93; 106pp; English.
XX
CC   The present sequence is a peptide-based construct derived from or based
CC   on subsequences identified and selected from Domain III of
CC   bactericidal/permeability-increasing protein (BPI). It may be used
CC   to treat fungal infections, and for inhibiting growth and replication of
CC   fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC   Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC   Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC   Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC   Malassezia, Actinomyceies, Sporothrix or Penicillium. It is also
CC   useful for treating microbial infections (especially from gram-positive
CC   bacteria).
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 70
AAB68749
ID   AAB68749 standard; Peptide; 10 AA.
XX
AC   AAB68749;
XX
DT   12-APR-2001  (first entry)
XX
DE   Peptide-based construct XMP-620.
XX
KW   Human; antifungal; bactericidal; fungal infection; microbial infection;
KW   bactericidal/permeability-increasing protein; BPI.
XX
OS   Homo sapiens.
XX
PN   WO200100671-A1.
XX
PD   04-JAN-2001.
XX
PF   23-JUN-2000; 2000WO-US17383.
XX
PR   25-JUN-1999;   99US-0344541.
XX
PA   (XOMA ) XOMA TECHNOLOGY LTD.
XX
PI   Little RG,  Lin J,  Gikonyo JGK;
XX
DR   WPI; 2001-122999/13.
XX
PT   Derivatized compounds are peptide-based constructs from Domain III
PT   (amino acids 142-169) of bactericidal/permeability-increasing protein,
PT   useful as antifungal compounds -
XX
PS   Claim 5; Page 94; 106pp; English.
XX
CC   The present sequence is a peptide-based construct derived from or based
CC   on subsequences identified and selected from Domain III of
CC   bactericidal/permeability-increasing protein (BPI). It may be used
CC   to treat fungal infections, and for inhibiting growth and replication of
CC   fungi, particularly Candida, Aspillergus, Cryptococcus, Histoplasma,
CC   Coccidiodes, Blastomyces, Basidiobolus, Conidiobolus, Rhizopus,
CC   Rhizomucor, Absidia, Mortierella, Cunninghamella, Saksenaea, Fusarium,
CC   Trichophyton, Trichosporon, Microsporum, Epidermophyton, Scytalidium,
CC   Malassezia, Actinomyceies, Sporothrix or Penicillium. It is also
CC   useful for treating microbial infections (especially from gram-positive
CC   bacteria).
XX
SQ   Sequence   10 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 71
AAB65426
ID   AAB65426 standard; Peptide; 10 AA.
XX
AC   AAB65426;
XX
DT   27-MAR-2001  (first entry)
XX
DE   Anti-fungal peptide XMP.293.
XX
KW   Human; BPI; antifungal; polymorphonuclear leukocyte; neutrophil;
KW   bactericidal/permeability-increasing protein; bactericidal;
KW   fungal infection.
XX
OS   Homo sapiens.
XX
PN   US6156730-A.
XX
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PD 05-DEC-2000.
XX
PF 08-JAN-1999; 99US-0227659.
XX
PR 21-MAR-1996; 96US-0621259.
PR 12-MAR-1993; 93US-0030644.
PR 15-JUL-1993; 93US-0093202.
PR 14-JAN-1994; 94US-0183222.
PR 11-MAR-1994; 94US-0209762.
PR 11-JUL-1994; 94US-0273540.
PR 15-SEP-1994; 94US-0306473.
PR 13-JAN-1995; 95US-0372105.
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Lim E, Fadem MB, Little RG;
XX
DR WPI; 2001-090160/10.
XX
PT Novel anti-fungal peptides derived from domain III of
PT bactericidal/permeability-increasing protein useful for killing or
PT inhibiting replication of fungi and for treating fungal infections -
XX
PS Example 2; Columns 147-148; 134pp; English.
XX
CC The present invention relates to antifungal peptides (see
CC AAB65301-B65550) derived from Domain III (amino acids 142-169) of
CC bactericidal/permeability-increasing protein (BPI). The present sequence
CC is one such antifungal peptide. BPI is a protein isolated from the
CC granules of mammalian polymorphonuclear leukocytes (PMNs or
CC neutrophils). BPI has potent bactericidal activity against a broad range
CC of gram-negative bacteria. The peptides of the present invention are
CC useful for killing or inhibiting replication of fungi, and treating
CC infections caused by fungus belonging to Candida, Aspergillus,
CC Cryptococcus species such as C.albicans, C.glabrata, C.krusei,
CC C.lusitaniae, C.parapsilosis and C.tropicalis.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 72
AAB65494
ID AAB65494 standard; Peptide; 10 AA.
XX
AC AAB65494;
XX
DT 27-MAR-2001 (first entry)
XX
DE Anti-fungal peptide XMP.363.
XX
KW Human; BPI; antifungal; polymorphonuclear leukocyte; neutrophil;
KW bactericidal/permeability-increasing protein; bactericidal;
KW fungal infection.
XX
OS Homo sapiens.
XX
PN US6156730-A.
XX
PD 05-DEC-2000.
XX
PF 08-JAN-1999; 99US-0227659.
XX
PR 21-MAR-1996; 96US-0621259.
PR 12-MAR-1993; 93US-0030644.
PR 15-JUL-1993; 93US-0093202.
PR 14-JAN-1994; 94US-0183222.
PR 11-MAR-1994; 94US-0209762.
PR 11-JUL-1994; 94US-0273540.
PR 15-SEP-1994; 94US-0306473.
PR 13-JAN-1995; 95US-0372105.
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Lim E, Fadem MB, Little RG;
XX
DR WPI; 2001-090160/10.
XX
PT Novel anti-fungal peptides derived from domain III of
PT bactericidal/permeability-increasing protein useful for killing or
PT inhibiting replication of fungi and for treating fungal infections -
XX
PS Example 2; Columns 195-196; 134pp; English.
XX
CC The present invention relates to antifungal peptides (see
CC AAB65301-B65550) derived from Domain III (amino acids 142-169) of
CC bactericidal/permeability-increasing protein (BPI). The present sequence
CC is one such antifungal peptide. BPI is a protein isolated from the
CC granules of mammalian polymorphonuclear leukocytes (PMNs or
CC neutrophils). BPI has potent bactericidal activity against a broad range
CC of gram-negative bacteria. The peptides of the present invention are
CC useful for killing or inhibiting replication of fungi, and treating
CC infections caused by fungus belonging to Candida, Aspergillus,
CC Cryptococcus species such as C.albicans, C.glabrata, C.krusei,
CC C.lusitaniae, C.parapsilosis and C.tropicalis.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 73
AAB65495
ID AAB65495 standard; Peptide; 10 AA.
XX
AC AAB65495;
XX
DT 27-MAR-2001 (first entry)
XX
DE Anti-fungal peptide XMP.364.
XX
KW Human; BPI; antifungal; polymorphonuclear leukocyte; neutrophil;
KW bactericidal/permeability-increasing protein; bactericidal;
KW fungal infection.
XX
OS Homo sapiens.
XX
PN US6156730-A.
XX
PD 05-DEC-2000.
XX
PF 08-JAN-1999; 99US-0227659.
XX
PR 21-MAR-1996; 96US-0621259.
PR 12-MAR-1993; 93US-0030644.
PR 15-JUL-1993; 93US-0093202.
PR 14-JAN-1994; 94US-0183222.
PR 11-MAR-1994; 94US-0209762.
PR 11-JUL-1994; 94US-0273540.
PR 15-SEP-1994; 94US-0306473.
PR 13-JAN-1995; 95US-0372105.

PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Lim E, Fadem MB, Little RG;
XX
DR WPI; 2001-090160/10.
XX
PT Novel anti-fungal peptides derived from domain III of
PT bactericidal/permeability-increasing protein useful for killing or
PT inhibiting replication of fungi and for treating fungal infections -
XX
PS Example 2; Columns 195-196; 134pp; English.
XX
CC The present invention relates to antifungal peptides (see
CC AAB65301-B65550) derived from Domain III (amino acids 142-169) of
CC bactericidal/permeability-increasing protein (BPI). The present sequence
CC is one such antifungal peptide. BPI is a protein isolated from the
CC granules of mammalian polymorphonuclear leukocytes (PMNs or
CC neutrophils). BPI has potent bactericidal activity against a broad range
CC of gram-negative bacteria. The peptides of the present invention are
CC useful for killing or inhibiting replication of fungi, and treating
CC infections caused by fungus belonging to Candida, Aspergillus,
CC Cryptococcus species such as C.albicans, C.glabrata, C.krusei,
CC C.lusitaniae, C.parapsilosis and C.tropicalis.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 74
AAB65496
ID AAB65496 standard; Peptide; 10 AA.
XX
AC AAB65496;
XX
DT 27-MAR-2001 (first entry)
XX
DE Anti-fungal peptide XMP.365.
XX
KW Human; BPI; antifungal; polymorphonuclear leukocyte; neutrophil;
KW bactericidal/permeability-increasing protein; bactericidal;
KW fungal infection.
XX
OS Homo sapiens.
XX
PN US6156730-A.
XX
PD 05-DEC-2000.
XX
PF 08-JAN-1999; 99US-0227659.
XX
PR 21-MAR-1996; 96US-0621259.
PR 12-MAR-1993; 93US-0030644.
PR 15-JUL-1993; 93US-0093202.
PR 14-JAN-1994; 94US-0183222.
PR 11-MAR-1994; 94US-0209762.
PR 11-JUL-1994; 94US-0273540.
PR 15-SEP-1994; 94US-0306473.
PR 13-JAN-1995; 95US-0372105.
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Lim E, Fadem MB, Little RG;
XX
DR WPI; 2001-090160/10.
XX
PT Novel anti-fungal peptides derived from domain III of
PT bactericidal/permeability-increasing protein useful for killing or
PT inhibiting replication of fungi and for treating fungal infections -
XX
PS Example 2; Columns 197-198; 134pp; English.
XX
CC The present invention relates to antifungal peptides (see
CC AAB65301-B65550) derived from Domain III (amino acids 142-169) of
CC bactericidal/permeability-increasing protein (BPI). The present sequence
CC is one such antifungal peptide. BPI is a protein isolated from the
CC granules of mammalian polymorphonuclear leukocytes (PMNs or
CC neutrophils). BPI has potent bactericidal activity against a broad range
CC of gram-negative bacteria. The peptides of the present invention are
CC useful for killing or inhibiting replication of fungi, and treating
CC infections caused by fungus belonging to Candida, Aspergillus,
CC Cryptococcus species such as C.albicans, C.glabrata, C.krusei,
CC C.lusitaniae, C.parapsilosis and C.tropicalis.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 75
AAB65497
ID AAB65497 standard; Peptide; 10 AA.
XX
AC AAB65497;
XX
DT 27-MAR-2001 (first entry)
XX
DE Anti-fungal peptide XMP.366.
XX
KW Human; BPI; antifungal; polymorphonuclear leukocyte; neutrophil;
KW bactericidal/permeability-increasing protein; bactericidal;
KW fungal infection.
XX
OS Homo sapiens.
XX
PN US6156730-A.
XX
PD 05-DEC-2000.
XX
PF 08-JAN-1999; 99US-0227659.
XX
PR 21-MAR-1996; 96US-0621259.
PR 12-MAR-1993; 93US-0030644.
PR 15-JUL-1993; 93US-0093202.
PR 14-JAN-1994; 94US-0183222.
PR 11-MAR-1994; 94US-0209762.
PR 11-JUL-1994; 94US-0273540.
PR 15-SEP-1994; 94US-0306473.
PR 13-JAN-1995; 95US-0372105.
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Lim E, Fadem MB, Little RG;
XX
DR WPI; 2001-090160/10.
XX
PT Novel anti-fungal peptides derived from domain III of
PT bactericidal/permeability-increasing protein useful for killing or
PT inhibiting replication of fungi and for treating fungal infections -
XX

PS Example 2; Columns 197-198; 134pp; English.
XX
CC The present invention relates to antifungal peptides (see
CC AAB65301-B65550) derived from Domain III (amino acids 142-169) of
CC bactericidal/permeability-increasing protein (BPI). The present sequence
CC is one such antifungal peptide. BPI is a protein isolated from the
CC granules of mammalian polymorphonuclear leukocytes (PMNs or
CC neutrophils). BPI has potent bactericidal activity against a broad range
CC of gram-negative bacteria. The peptides of the present invention are
CC useful for killing or inhibiting replication of fungi, and treating
CC infections caused by fungus belonging to Candida, Aspergillus,
CC Cryptococcus species such as C.albicans, C.glabrata, C.krusei,
CC C.lusitaniae, C.parapsilosis and C.tropicalis.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 76
AAB65504
ID AAB65504 standard; Peptide; 10 AA.
XX
AC AAB65504;
XX
DT 27-MAR-2001 (first entry)
XX
DE Anti-fungal peptide XMP.373.
XX
KW Human; BPI; antifungal; polymorphonuclear leukocyte; neutrophil;
KW bactericidal/permeability-increasing protein; bactericidal;
KW fungal infection.
XX
OS Homo sapiens.
XX
PN US6156730-A.
XX
PD 05-DEC-2000.
XX
PF 08-JAN-1999; 99US-0227659.
XX
PR 21-MAR-1996; 96US-0621259.
PR 12-MAR-1993; 93US-0030644.
PR 15-JUL-1993; 93US-0093202.
PR 14-JAN-1994; 94US-0183222.
PR 11-MAR-1994; 94US-0209762.
PR 11-JUL-1994; 94US-0273540.
PR 15-SEP-1994; 94US-0306473.
PR 13-JAN-1995; 95US-0372105.
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Lim E, Fadem MB, Little RG;
XX
DR WPI; 2001-090160/10.
XX
PT Novel anti-fungal peptides derived from domain III of
PT bactericidal/permeability-increasing protein useful for killing or
PT inhibiting replication of fungi and for treating fungal infections -
XX
PS Example 2; Columns 203-204; 134pp; English.
XX
CC The present invention relates to antifungal peptides (see
CC AAB65301-B65550) derived from Domain III (amino acids 142-169) of
CC bactericidal/permeability-increasing protein (BPI). The present sequence
CC is one such antifungal peptide. BPI is a protein isolated from the
CC granules of mammalian polymorphonuclear leukocytes (PMNs or
CC neutrophils). BPI has potent bactericidal activity against a broad range
CC of gram-negative bacteria. The peptides of the present invention are
CC useful for killing or inhibiting replication of fungi, and treating
CC infections caused by fungus belonging to Candida, Aspergillus,
CC Cryptococcus species such as C.albicans, C.glabrata, C.krusei,
CC C.lusitaniae, C.parapsilosis and C.tropicalis.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 77
AAB65544
ID AAB65544 standard; Peptide; 10 AA.
XX
AC AAB65544;
XX
DT 27-MAR-2001 (first entry)
XX
DE Anti-fungal peptide XMP.414.
XX
KW Human; BPI; antifungal; polymorphonuclear leukocyte; neutrophil;
KW bactericidal/permeability-increasing protein; bactericidal;
KW fungal infection.
XX
OS Homo sapiens.
XX
PN US6156730-A.
XX
PD 05-DEC-2000.
XX
PF 08-JAN-1999; 99US-0227659.
XX
PR 21-MAR-1996; 96US-0621259.
PR 12-MAR-1993; 93US-0030644.
PR 15-JUL-1993; 93US-0093202.
PR 14-JAN-1994; 94US-0183222.
PR 11-MAR-1994; 94US-0209762.
PR 11-JUL-1994; 94US-0273540.
PR 15-SEP-1994; 94US-0306473.
PR 13-JAN-1995; 95US-0372105.
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Lim E, Fadem MB, Little RG;
XX
DR WPI; 2001-090160/10.
XX
PT Novel anti-fungal peptides derived from domain III of
PT bactericidal/permeability-increasing protein useful for killing or
PT inhibiting replication of fungi and for treating fungal infections -
XX
PS Example 2; Columns 233-234; 134pp; English.
XX
CC The present invention relates to antifungal peptides (see
CC AAB65301-B65550) derived from Domain III (amino acids 142-169) of
CC bactericidal/permeability-increasing protein (BPI). The present sequence
CC is one such antifungal peptide. BPI is a protein isolated from the
CC granules of mammalian polymorphonuclear leukocytes (PMNs or
CC neutrophils). BPI has potent bactericidal activity against a broad range
CC of gram-negative bacteria. The peptides of the present invention are
CC useful for killing or inhibiting replication of fungi, and treating
CC infections caused by fungus belonging to Candida, Aspergillus,
CC Cryptococcus species such as C.albicans, C.glabrata, C.krusei,

CC C.lusitaniae, C.parapsilosis and C.tropicalis.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||:|:|||
Db 1 KWLIQLFHKK 10

RESULT 78
AAB65545
ID AAB65545 standard; Peptide; 10 AA.
XX
AC AAB65545;
XX
DT 27-MAR-2001 (first entry)
XX
DE Anti-fungal peptide XMP.415.
XX
KW Human; BPI; antifungal; polymorphonuclear leukocyte; neutrophil;
KW bactericidal/permeability-increasing protein; bactericidal;
KW fungal infection.
XX
OS Homo sapiens.
XX
PN US6156730-A.
XX
PD 05-DEC-2000.
XX
PF 08-JAN-1999; 99US-0227659.
XX
PR 21-MAR-1996; 96US-0621259.
PR 12-MAR-1993; 93US-0030644.
PR 15-JUL-1993; 93US-0093202.
PR 14-JAN-1994; 94US-0183222.
PR 11-MAR-1994; 94US-0209762.
PR 11-JUL-1994; 94US-0273540.
PR 15-SEP-1994; 94US-0306473.
PR 13-JAN-1995; 95US-0372105.
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Lim E, Fadem MB, Little RG;
XX
DR WPI; 2001-090160/10.
XX
PT Novel anti-fungal peptides derived from domain III of
PT bactericidal/permeability-increasing protein useful for killing or
PT inhibiting replication of fungi and for treating fungal infections -
XX
PS Example 2; Columns 233-234; 134pp; English.
XX
CC The present invention relates to antifungal peptides (see
CC AAB65301-B65550) derived from Domain III (amino acids 142-169) of
CC bactericidal/permeability-increasing protein (BPI). The present sequence
CC is one such antifungal peptide. BPI is a protein isolated from the
CC granules of mammalian polymorphonuclear leukocytes (PMNs or
CC neutrophils). BPI has potent bactericidal activity against a broad range
CC of gram-negative bacteria. The peptides of the present invention are
CC useful for killing or inhibiting replication of fungi, and treating
CC infections caused by fungus belonging to Candida, Aspergillus,
CC Cryptococcus species such as C.albicans, C.glabrata, C.krusei,
CC C.lusitaniae, C.parapsilosis and C.tropicalis.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
|||:|||||
Db 1 KWLIQLFHKK 10

RESULT 79
AAB65546
ID AAB65546 standard; Peptide; 10 AA.
XX
AC AAB65546;
XX
DT 27-MAR-2001 (first entry)
XX
DE Anti-fungal peptide XMP.416.
XX
KW Human; BPI; antifungal; polymorphonuclear leukocyte; neutrophil;
KW bactericidal/permeability-increasing protein; bactericidal;
KW fungal infection.
XX
OS Homo sapiens.
XX
PN US6156730-A.
XX
PD 05-DEC-2000.
XX
PF 08-JAN-1999; 99US-0227659.
XX
PR 21-MAR-1996; 96US-0621259.
PR 12-MAR-1993; 93US-0030644.
PR 15-JUL-1993; 93US-0093202.
PR 14-JAN-1994; 94US-0183222.
PR 11-MAR-1994; 94US-0209762.
PR 11-JUL-1994; 94US-0273540.
PR 15-SEP-1994; 94US-0306473.
PR 13-JAN-1995; 95US-0372105.
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Lim E, Fadem MB, Little RG;
XX
DR WPI; 2001-090160/10.
XX
PT Novel anti-fungal peptides derived from domain III of
PT bactericidal/permeability-increasing protein useful for killing or
PT inhibiting replication of fungi and for treating fungal infections -
XX
PS Example 2; Columns 235-236; 134pp; English.
XX
CC The present invention relates to antifungal peptides (see
CC AAB65301-B65550) derived from Domain III (amino acids 142-169) of
CC bactericidal/permeability-increasing protein (BPI). The present sequence
CC is one such antifungal peptide. BPI is a protein isolated from the
CC granules of mammalian polymorphonuclear leukocytes (PMNs or
CC neutrophils). BPI has potent bactericidal activity against a broad range
CC of gram-negative bacteria. The peptides of the present invention are
CC useful for killing or inhibiting replication of fungi, and treating
CC infections caused by fungus belonging to Candida, Aspergillus,
CC Cryptococcus species such as C.albicans, C.glabrata, C.krusei,
CC C.lusitaniae, C.parapsilosis and C.tropicalis.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 80
AAB65547
ID AAB65547 standard; Peptide; 10 AA.
XX
AC AAB65547;
XX
DT 27-MAR-2001 (first entry)
XX
DE Anti-fungal peptide XMP.417.
XX
KW Human; BPI; antifungal; polymorphonuclear leukocyte; neutrophil;
KW bactericidal/permeability-increasing protein; bactericidal;
KW fungal infection.
XX
OS Homo sapiens.
XX
PN US6156730-A.
XX
PD 05-DEC-2000.
XX
PF 08-JAN-1999; 99US-0227659.
XX
PR 21-MAR-1996; 96US-0621259.
PR 12-MAR-1993; 93US-0030644.
PR 15-JUL-1993; 93US-0093202.
PR 14-JAN-1994; 94US-0183222.
PR 11-MAR-1994; 94US-0209762.
PR 11-JUL-1994; 94US-0273540.
PR 15-SEP-1994; 94US-0306473.
PR 13-JAN-1995; 95US-0372105.
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Lim E, Fadem MB, Little RG;
XX
DR WPI; 2001-090160/10.
XX
PT Novel anti-fungal peptides derived from domain III of
PT bactericidal/permeability-increasing protein useful for killing or
PT inhibiting replication of fungi and for treating fungal infections -
XX
PS Example 2; Columns 235-236; 134pp; English.
XX
CC The present invention relates to antifungal peptides (see
CC AAB65301-B65550) derived from Domain III (amino acids 142-169) of
CC bactericidal/permeability-increasing protein (BPI). The present sequence
CC is one such antifungal peptide. BPI is a protein isolated from the
CC granules of mammalian polymorphonuclear leukocytes (PMNs or
CC neutrophils). BPI has potent bactericidal activity against a broad range
CC of gram-negative bacteria. The peptides of the present invention are
CC useful for killing or inhibiting replication of fungi, and treating
CC infections caused by fungus belonging to Candida, Aspergillus,
CC Cryptococcus species such as C.albicans, C.glabrata, C.krusei,
CC C.lusitaniae, C.parapsilosis and C.tropicalis.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 81
AAB65550
ID AAB65550 standard; Peptide; 10 AA.
XX
AC AAB65550;
XX
DT 27-MAR-2001 (first entry)
XX
DE Anti-fungal peptide XMP.420.
XX
KW Human; BPI; antifungal; polymorphonuclear leukocyte; neutrophil;
KW bactericidal/permeability-increasing protein; bactericidal;
KW fungal infection.
XX
OS Homo sapiens.
XX
PN US6156730-A.
XX
PD 05-DEC-2000.
XX
PF 08-JAN-1999; 99US-0227659.
XX
PR 21-MAR-1996; 96US-0621259.
PR 12-MAR-1993; 93US-0030644.
PR 15-JUL-1993; 93US-0093202.
PR 14-JAN-1994; 94US-0183222.
PR 11-MAR-1994; 94US-0209762.
PR 11-JUL-1994; 94US-0273540.
PR 15-SEP-1994; 94US-0306473.
PR 13-JAN-1995; 95US-0372105.
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Lim E, Fadem MB, Little RG;
XX
DR WPI; 2001-090160/10.
XX
PT Novel anti-fungal peptides derived from domain III of
PT bactericidal/permeability-increasing protein useful for killing or
PT inhibiting replication of fungi and for treating fungal infections -
XX
PS Example 2; Columns 237-238; 134pp; English.
XX
CC The present invention relates to antifungal peptides (see
CC AAB65301-B65550) derived from Domain III (amino acids 142-169) of
CC bactericidal/permeability-increasing protein (BPI). The present sequence
CC is one such antifungal peptide. BPI is a protein isolated from the
CC granules of mammalian polymorphonuclear leukocytes (PMNs or
CC neutrophils). BPI has potent bactericidal activity against a broad range
CC of gram-negative bacteria. The peptides of the present invention are
CC useful for killing or inhibiting replication of fungi, and treating
CC infections caused by fungus belonging to Candida, Aspergillus,
CC Cryptococcus species such as C.albicans, C.glabrata, C.krusei,
CC C.lusitaniae, C.parapsilosis and C.tropicalis.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 82
AAE26312
ID AAE26312 standard; peptide; 10 AA.
XX
AC AAE26312;
XX
DT 14-NOV-2002 (first entry)
XX
DE Human rBPI protein product, XMP.365.
XX
KW Human; bactericidal/permeability-increasing protein; BPI; brain injury;

KW pericyte cell proliferation; diabetic retinopathy; diabetic nephropathy;
KW diabetic polyneuropathy; skeletal muscle degeneration; gynaecological;
KW Raynaud's syndrome; retinitis pigmentosa; bone degenerative disorder;
KW age-related macular degeneration; ARMD; multiple sclerosis; hypertension;
KW Alzheimer's disease; atherosclerosis; restenosis; ischaemia; vasotropic;
KW tranquillizer; stroke; coronary artery disease; myocardial infarction;
KW acute respiratory distress syndrome; ARDS; nootropic; vulnerary;
KW cytostatic.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Misc-difference 1..10
FT /note= "D-form amino acids"
FT Modified-site 10
FT /note= "C-terminal amide"
XX
PN WO200255099-A2.
XX
PD 18-JUL-2002.
XX
PF 03-DEC-2001; 2001WO-US46609.
XX
PR 01-DEC-2000; 2000US-250542P.
XX
PA (XOMA) XOMA TECHNOLOGY LTD.
XX
PI King GL, Abrahamson S, Pugsley M;
XX
DR WPI; 2002-636504/68.
XX
PT Modulating pericyte cell proliferation, comprising administering
PT bactericidal/permeability-increasing protein product or its inhibitors
PT -
XX
PS Example 2; Page 59; 62pp; English.
XX
CC The invention relates to a method for enhancing or inhibiting pericyte
CC cell proliferation. The method comprises administering a bactericidal/
CC permeability-increasing (BPI) protein product to enhance proliferation,
CC or administering an agent that inhibits BPI protein product-induced
CC proliferation. The method is useful for enhancing pericyte cell
CC proliferation, where the onset of diabetic retinopathy is prevented and
CC the patient is suffering from a complication of diabetes selected from
CC diabetic polyneuropathy, diabetic nephropathy, skeletal muscle
CC degeneration after pericyte degeneration, or other organ complications
CC of diabetes. The method is also useful in diseases associated with the
CC presence of autoantibodies to pericytes, retinitis pigmentosa, age-
CC related macular degeneration (ARMD), ovarian failure, multiple sclerosis,
CC Alzheimer's disease, traumatic brain injury, and other conditions having
CC perturbation of the blood-brain-barrier or partial seizures. If the
CC patient is pregnant, the placental development is enhanced, and if the
CC patient is in need of wound healing or has a bone degenerative disorder,
CC the BPI protein product is administered to enhance production of
CC fibroblasts, or chondroblasts or osteoblasts. The method is also useful
CC for inhibiting pericyte cell proliferation hypertension, a disorder
CC associated with vascular disease selected from formation of vascular
CC calcifications and atherosclerotic plaques, atherosclerosis, restenosis,
CC cerebrovascular ischaemia, stroke, coronary artery disease, myocardial
CC ischaemia, myocardial infarction, peripheral vascular disease, Raynaud's
CC syndrome, early occlusion of peripheral arteries, vascular remodelling
CC associated with pulmonary hypertension, acute respiratory distress
CC syndrome (ARDS), and endometriosis or adenomyosis. The present sequence
CC is human recombinant BPI (rBPI) protein product.
XX
SQ Sequence 10 AA;

Query Match 100.0%; Score 57; DB 23; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 83
AAW04043
ID AAW04043 standard; peptide; 11 AA.
XX
AC AAW04043;
XX
DT 01-NOV-1996 (first entry)
XX
DE Antifungal peptide XMP.352.
XX
KW Antifungal peptide; inhibitor; Domain III; polymorphonuclear leukocyte;
KW bactericidal/permeability-increasing protein; BPI; mammalian; PMN; fungi;
KW neutrophil; replication inhibitor; fungal infection; Aspergillus;
KW Cryptococcus; Candida; C.albicans; C.galabrat; C.krusei; C.lusitaniae;
KW C.parapsilosis; C.tropicalis; therapy.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 11
FT /note= "amidated"
XX
PN WO9608509-A1.
XX
PD 21-MAR-1996.
XX
PF 20-JUL-1995; 95WO-US09262.
XX
PR 13-JAN-1995; 95US-0372105.
PR 15-SEP-1994; 94US-0306473.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1996-179900/18.
XX
PT Antifungal peptide(s) derived from Domain III of BPI protein - used
PT in vitro for killing or inhibiting replication of fungi, esp.
PT Candida species
XX
PS Claim 5; Page 164; 199pp; English.
XX
CC AAW04000-W04160 represent antifungal peptides. These sequences are
CC based on (or derived from) Domain III of the
CC bactericidal/permeability-increasing protein (BPI). BPI is a protein
CC that can be isolated from the granules of mammalian polymorphonuclear
CC leukocytes (PMNs or neutrophils). These antifungal peptides can be used
CC for killing, or inhibiting replication of, fungi in vitro. These
CC sequences can also be used for treatment of a fungal infection involving
CC fungi from the species Candida, Aspergillus and Cryptococcus. The
CC sequences are especially useful for treating C.albicans, C.galabrat,
CC C.krusei, C.lusitaniae, C.parapsilosis and C.tropicalis infections.
XX
SQ Sequence 11 AA;

Query Match 100.0%; Score 57; DB 17; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.0018;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 2 KWLIQLFHKK 11

RESULT 84
AAW04004
ID AAW04004 standard; peptide; 11 AA.
XX
AC AAW04004;

XX
DT 31-OCT-1996 (first entry)
XX
DE Antifungal peptide XMP.289.
XX
KW Antifungal peptide; inhibitor; Domain III; polymorphonuclear leukocyte;
KW bactericidal/permeability-increasing protein; BPI; mammalian; PMN; fungi;
KW neutrophil; replication inhibitor; fungal infection; Aspergillus;
KW Cryptococcus; Candida; C.albicans; C.galabrat; C.krusei; C.lusitaniae;
KW C.parapsilosis; C.tropicalis; therapy.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 11
FT /note= "amidated"
XX
PN WO9608509-A1.
XX
PD 21-MAR-1996.
XX
PF 20-JUL-1995; 95WO-US09262.
XX
PR 13-JAN-1995; 95US-0372105
PR 15-SEP-1994; 94US-0306473
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1996-179900/18.
XX
PT Antifungal peptide(s) derived from Domain III of BPI protein - used
PT in vitro for killing or inhibiting replication of fungi, esp.
PT Candida species
XX
PS Claim 5; Page 139; 199pp; English.
XX
CC AAW04000-W04160 represent antifungal peptides. These sequences are
CC based on (or derived from) Domain III of the
CC bactericidal/permeability-increasing protein (BPI). BPI is a protein
CC that can be isolated from the granules of mammalian polymorphonuclear
CC leukocytes (PMNs or neutrophils). These antifungal peptides can be used
CC for killing, or inhibiting replication of, fungi in vitro. These
CC sequences can also be used for treatment of a fungal infection involving
CC fungi from the species Candida, Aspergillus and Cryptococcus. The
CC sequences are especially useful for treating C.albicans, C.galabrat,
CC C.krusei, C.lusitaniae, C.parapsilosis and C.tropicalis infections.
XX
SQ Sequence 11 AA;

Query Match 100.0%; Score 57; DB 17; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.0018;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 2 KWLIQLFHKK 11

RESULT 85
AAW44582
ID AAW44582 standard; peptide; 11 AA.
XX
AC AAW44582;
XX
DT 27-APR-1998 (first entry)
XX
DE Anti-fungal peptide #183 based on BPI protein (residues 142-160).
XX
KW Anti-fungal peptide; bactericidal-permeability-increasing protein; BPI;
KW polymorphonuclear leukocyte; fungicide.
XX
OS Synthetic.
OS Mammalia.
XX
FH Key Location/Qualifiers
FT Modified-site 11
FT /note= "C-terminal amide"
XX
PN WO9704008-A1.
XX
PD 06-FEB-1997.
XX
PF 21-MAR-1996; 96WO-US03845.
XX
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1997-132578/12.
XX
PT Anti-fungal peptide(s) derived from or based on domain III of
PT bactericidal-permeability-increasing protein - are used in vitro or
PT in vivo as a fungicides
XX
PS Claim 1; Page 201; 230pp; English.
XX
CC This is a specifically claimed anti-fungal peptide which is based on
CC domain III (amino acids 142-160) of bactericidal-permeability-increasing
CC protein (BPI), isolated from the granules of mammalian polymorphonuclear
CC leukocytes. It is used in compositions with diluents, carriers or
CC adjuvants to treat fungal infections in patients. It may also be used in
CC vitro to kill or inhibit the replication of fungi, such as in
CC decontaminating fluids and sterilising medical and implant devices.
XX
SQ Sequence 11 AA;

Query Match 100.0%; Score 57; DB 18; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.0018;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 2 KWLIQLFHKK 11

RESULT 86
AAW43764
ID AAW43764 standard; peptide; 11 AA.
XX
AC AAW43764;
XX
DT 20-APR-1998 (first entry)
XX
DE Bactericidal/permeability increasing peptide XMP.352.
XX
KW Bactericidal/permeability increasing peptide; BPI; fusion protein;
KW bacterial infection; fungal infection; endotoxin; Herpes;
KW angiogenesis; fungicidal; recombinant DNA; vector.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 11
FT /note= "Amidated"
XX
PN WO9735009-A1.
XX
PD 25-SEP-1997.
XX
PF 18-MAR-1997; 97WO-US05287.
XX

PR 22-MAR-1996; 96US-0621803.
XX
PA (XOMA) XOMA CORP.
XX
PI Better MD;
XX
DR WPI; 1997-480215/44.
XX
PT Recombinant production of bactericidal/permeability increasing
PT protein - by expression as a fusion protein in microbial host cells,
PT then cleaving the BPI peptide from the carrier
XX
PS Claim 10; Page 131; 186pp; English.
XX
CC A new recombinant DNA vector construct has been developed which encodes
CC a fusion protein and is suitable for introduction into a bacterial host.
CC The vector comprises: (a) DNA encoding at least one cationic
CC bactericidal/permeability increasing peptide (BPI), (b) DNA encoding a
CC carrier protein, and (c) DNA encoding an amino acid (aa) cleavage site
CC located between (a) and (b). The present sequence represents a
CC specifically claimed BPI peptide. The peptides have many uses including
CC the treatment of bacterial and fungal infections. BPI peptides also
CC bind to endotoxins and heparin, neutralising their effects. The
CC peptides have further been shown to inhibit angiogenesis (partly due to
CC heparin-binding activity). The fusion proteins have been found to be
CC expressed in large amounts without significant proteolysis, and in some
CC cases are actually secreted from the host cells. This allows the
CC indirect production of anti-microbial BPI peptides in microbial hosts.
XX
SQ Sequence 11 AA;

Query Match 100.0%; Score 57; DB 18; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.0018;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 2 KWLIQLFHKK 11

RESULT 87
AAW43711
ID AAW43711 standard; peptide; 11 AA.
XX
AC AAW43711;
XX
DT 20-APR-1998 (first entry)
XX
DE Bactericidal/permeability increasing peptide XMP.289.
XX
KW Bactericidal/permeability increasing peptide; BPI; fusion protein;
KW bacterial infection; fungal infection; endotoxin; heparin;
KW angiogenesis; fungicidal; recombinant DNA; vector.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 11
FT /note= "Amidated"
XX
PN WO9735009-A1.
XX
PD 25-SEP-1997.
XX
PF 18-MAR-1997; 97WO-US05287.
XX
PR 22-MAR-1996; 96US-0621803.
XX
PA (XOMA) XOMA CORP.
XX
PI Better MD;
XX
DR WPI; 1997-480215/44.
XX
PT Recombinant production of bactericidal/permeability increasing
PT protein - by expression as a fusion protein in microbial host cells,
PT then cleaving the BPI peptide from the carrier
XX
PS Claim 10; Page 111; 186pp; English.
XX
CC A new recombinant DNA vector construct has been developed which encodes
CC a fusion protein and is suitable for introduction into a bacterial host.
CC The vector comprises: (a) DNA encoding at least one cationic
CC bactericidal/permeability increasing peptide (BPI), (b) DNA encoding a
CC carrier protein, and (c) DNA encoding an amino acid (aa) cleavage site
CC located between (a) and (b). The present sequence represents a
CC specifically claimed BPI peptide. The peptides have many uses including
CC the treatment of bacterial and fungal infections. BPI peptides also
CC bind to endotoxins and heparin, neutralising their effects. The
CC peptides have further been shown to inhibit angiogenesis (partly due to
CC heparin-binding activity). The fusion proteins have been found to be
CC expressed in large amounts without significant proteolysis, and in some
CC cases are actually secreted from the host cells. This allows the
CC indirect production of anti-microbial BPI peptides in microbial hosts.
XX
SQ Sequence 11 AA;

Query Match 100.0%; Score 57; DB 18; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.0018;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 2 KWLIQLFHKK 11

RESULT 88
AAW44521
ID AAW44521 standard; peptide; 11 AA.
XX
AC AAW44521;
XX
DT 27-APR-1998 (first entry)
XX
DE Anti-fungal peptide #122 based on BPI protein (residues 142-169).
XX
KW Anti-fungal peptide; bactericidal-permeability-increasing protein; BPI;
KW polymorphonuclear leukocyte; fungicide.
XX
OS Synthetic.
OS Mammalia.
XX
FH Key Location/Qualifiers
FT Modified-site 11
FT /note= "C-terminal amide"
XX
PN WO9704008-A1.
XX
PD 06-FEB-1997.
XX
PF 21-MAR-1996; 96WO-US03845.
XX
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1997-132578/12.
XX
PT Anti-fungal peptide(s) derived from or based on domain III of
PT bactericidal-permeability-increasing protein - are used in vitro or
PT in vivo as a fungicides
XX
PS Claim 1; Page 176; 230pp; English.

```
XX
CC   This is a specifically claimed anti-fungal peptide which is based on
CC   domain III (amino acids 142-160) of bactericidal-permeability-increasing
CC   protein (BPI), isolated from the granules of mammalian polymorphonuclear
CC   leukocytes. It is used in compositions with diluents, carriers or
CC   adjuvants to treat fungal infections in patients. It may also be used in
CC   vitro to kill or inhibit the replication of fungi, such as in
CC   decontaminating fluids and sterilising medical and implant devices.
XX
SQ   Sequence   11 AA;

  Query Match             100.0%;  Score 57;  DB 18;  Length 11;
  Best Local Similarity   100.0%;  Pred. No. 0.0018;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          2 KWLIQLFHKK 11


RESULT 89
AAY00559
ID   AAY00559 standard; Peptide; 11 AA.
XX
AC   AAY00559;
XX
DT   07-MAY-1999  (first entry)
XX
DE   Antifungal peptide XMP.352.
XX
KW   Antifungal; BPI; bactericidal/permeability increasing protein;
KW   Candida infection.
XX
OS   Synthetic.
XX
PN   US5858974-A.
XX
PD   12-JAN-1999.
XX
PF   21-MAR-1996;   96US-0621259.
XX
PR   21-MAR-1996;   96US-0621259.
PR   20-JUL-1995;   95US-0504841.
XX
PA   (XOMA ) XOMA CORP.
XX
PI   Fadem MB,  Lim E,  Little RG;
XX
DR   WPI; 1999-119956/10.
XX
PT   Antifungal peptides - comprising part of bactericidal or
PT   permeability-increasing protein sequence or related sequence
XX
PS   Disclosure; Columns 181-182; 132pp; English.
XX
CC   New peptides are provided which are based on Domain III (amino acids
CC   142-169) of human bactericidal/permeability-increasing protein (BPI).
CC   The peptides all have a C-terminal amide. More particularly, the Claims
CC   relate to: (1) a peptide that has an amino acid sequence of human BPI
CC   from position 148 to position 161 (KSKVGWLIQLFHKK) and variants of the
CC   sequence having antifungal activity; and (2) an antifungal peptide
CC   having 6-14 amino acids comprising (a) a core sequence selected from
CC   LIQL, IQLF, WLIQL, LIQLF and WLIQLF and (b) one or more cationic amino
CC   acids selected from K, R, H, Orn (ornithine) and Dab (diaminobutyric
CC   acid) at the N and/or C terminus of the core sequence. The new peptides
CC   are used for killing or inhibiting replication of fungi in vitro; and
CC   for treating fungal infections in vivo, in particular infections of
CC   Candida, Aspergillus or Cryptococcus spp., especially C. albicans, C.
CC   krusei, C. lusitaniae, C. parapsilosis or C. tropicalis. The peptide
CC   can be administered topically, intravenously, orally or as an aerosol,
CC   optionally together with a non-peptide antifungal agent.
XX
SQ   Sequence   11 AA;

  Query Match             100.0%;  Score 57;  DB 20;  Length 11;
  Best Local Similarity   100.0%;  Pred. No. 0.0018;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          2 KWLIQLFHKK 11


RESULT 90
AAY00498
ID   AAY00498 standard; Peptide; 11 AA.
XX
AC   AAY00498;
XX
DT   07-MAY-1999  (first entry)
XX
DE   Antifungal peptide XMP.289.
XX
KW   Antifungal; BPI; bactericidal/permeability increasing protein;
KW   Candida infection.
XX
OS   Synthetic.
XX
PN   US5858974-A.
XX
PD   12-JAN-1999.
XX
PF   21-MAR-1996;   96US-0621259.
XX
PR   21-MAR-1996;   96US-0621259.
PR   20-JUL-1995;   95US-0504841.
XX
PA   (XOMA ) XOMA CORP.
XX
PI   Fadem MB,  Lim E,  Little RG;
XX
DR   WPI; 1999-119956/10.
XX
PT   Antifungal peptides - comprising part of bactericidal or
PT   permeability-increasing protein sequence or related sequence
XX
PS   Disclosure; Columns 141-142; 132pp; English.
XX
CC   New peptides are provided which are based on Domain III (amino acids
CC   142-169) of human bactericidal/permeability-increasing protein (BPI).
CC   The peptides all have a C-terminal amide. More particularly, the Claims
CC   relate to: (1) a peptide that has an amino acid sequence of human BPI
CC   from position 148 to position 161 (KSKVGWLIQLFHKK) and variants of the
CC   sequence having antifungal activity; and (2) an antifungal peptide
CC   having 6-14 amino acids comprising (a) a core sequence selected from
CC   LIQL, IQLF, WLIQL, LIQLF and WLIQLF and (b) one or more cationic amino
CC   acids selected from K, R, H, Orn (ornithine) and Dab (diaminobutyric
CC   acid) at the N and/or C terminus of the core sequence. The new peptides
CC   are used for killing or inhibiting replication of fungi in vitro; and
CC   for treating fungal infections in vivo, in particular infections of
CC   Candida, Aspergillus or Cryptococcus spp., especially C. albicans, C.
CC   krusei, C. lusitaniae, C. parapsilosis or C. tropicalis. The peptide
CC   can be administered topically, intravenously, orally or as an aerosol,
CC   optionally together with a non-peptide antifungal agent.
XX
SQ   Sequence   11 AA;

  Query Match             100.0%;  Score 57;  DB 20;  Length 11;
  Best Local Similarity   100.0%;  Pred. No. 0.0018;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          2 KWLIQLFHKK 11
```

RESULT 91
AAB65422
ID AAB65422 standard; Peptide; 11 AA.
XX
AC AAB65422;
XX
DT 27-MAR-2001 (first entry)
XX
DE Anti-fungal peptide XMP.289.
XX
KW Human; BPI; antifungal; polymorphonuclear leukocyte; neutrophil;
KW bactericidal/permeability-increasing protein; bactericidal;
KW fungal infection.
XX
OS Homo sapiens.
XX
PN US6156730-A.
XX
PD 05-DEC-2000.
XX
PF 08-JAN-1999; 99US-0227659.
XX
PR 21-MAR-1996; 96US-0621259.
PR 12-MAR-1993; 93US-0030644.
PR 15-JUL-1993; 93US-0093202.
PR 14-JAN-1994; 94US-0183222.
PR 11-MAR-1994; 94US-0209762.
PR 11-JUL-1994; 94US-0273540.
PR 15-SEP-1994; 94US-0306473.
PR 13-JAN-1995; 95US-0372105.
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Lim E, Fadem MB, Little RG;
XX
DR WPI; 2001-090160/10.
XX
PT Novel anti-fungal peptides derived from domain III of
PT bactericidal/permeability-increasing protein useful for killing or
PT inhibiting replication of fungi and for treating fungal infections -
XX
PS Example 2; Columns 143-144; 134pp; English.
XX
CC The present invention relates to antifungal peptides (see
CC AAB65301-B65550) derived from Domain III (amino acids 142-169) of
CC bactericidal/permeability-increasing protein (BPI). The present sequence
CC is one such antifungal peptide. BPI is a protein isolated from the
CC granules of mammalian polymorphonuclear leukocytes (PMNs or
CC neutrophils). BPI has potent bactericidal activity against a broad range
CC of gram-negative bacteria. The peptides of the present invention are
CC useful for killing or inhibiting replication of fungi, and treating
CC infections caused by fungus belonging to Candida, Aspergillus,
CC Cryptococcus species such as C.albicans, C.glabrata, C.krusei,
CC C.lusitaniae, C.parapsilosis and C.tropicalis.
XX
SQ Sequence 11 AA;

Query Match 100.0%; Score 57; DB 22; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.0018;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 2 KWLIQLFHKK 11

RESULT 92
AAB65483
ID AAB65483 standard; Peptide; 11 AA.
XX
AC AAB65483;
XX
DT 27-MAR-2001 (first entry)
XX
DE Anti-fungal peptide XMP.352.
XX
KW Human; BPI; antifungal; polymorphonuclear leukocyte; neutrophil;
KW bactericidal/permeability-increasing protein; bactericidal;
KW fungal infection.
XX
OS Homo sapiens.
XX
PN US6156730-A.
XX
PD 05-DEC-2000.
XX
PF 08-JAN-1999; 99US-0227659.
XX
PR 21-MAR-1996; 96US-0621259.
PR 12-MAR-1993; 93US-0030644.
PR 15-JUL-1993; 93US-0093202.
PR 14-JAN-1994; 94US-0183222.
PR 11-MAR-1994; 94US-0209762.
PR 11-JUL-1994; 94US-0273540.
PR 15-SEP-1994; 94US-0306473.
PR 13-JAN-1995; 95US-0372105.
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Lim E, Fadem MB, Little RG;
XX
DR WPI; 2001-090160/10.
XX
PT Novel anti-fungal peptides derived from domain III of
PT bactericidal/permeability-increasing protein useful for killing or
PT inhibiting replication of fungi and for treating fungal infections -
XX
PS Example 2; Columns 187-188; 134pp; English.
XX
CC The present invention relates to antifungal peptides (see
CC AAB65301-B65550) derived from Domain III (amino acids 142-169) of
CC bactericidal/permeability-increasing protein (BPI). The present sequence
CC is one such antifungal peptide. BPI is a protein isolated from the
CC granules of mammalian polymorphonuclear leukocytes (PMNs or
CC neutrophils). BPI has potent bactericidal activity against a broad range
CC of gram-negative bacteria. The peptides of the present invention are
CC useful for killing or inhibiting replication of fungi, and treating
CC infections caused by fungus belonging to Candida, Aspergillus,
CC Cryptococcus species such as C.albicans, C.glabrata, C.krusei,
CC C.lusitaniae, C.parapsilosis and C.tropicalis.
XX
SQ Sequence 11 AA;

Query Match 100.0%; Score 57; DB 22; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.0018;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 2 KWLIQLFHKK 11

RESULT 93
AAW04001
ID AAW04001 standard; peptide; 12 AA.
XX
AC AAW04001;
XX
DT 31-OCT-1996 (first entry)
XX
DE Antifungal peptide XMP.286.
XX
KW Antifungal peptide; inhibitor; Domain III; polymorphonuclear leukocyte;
KW bactericidal/permeability-increasing protein; BPI; mammalian; PMN; fungi;

KW neutrophil; replication inhibitor; fungal infection; Aspergillus;
KW Cryptococcus; Candida; C.albicans; C.galabrat; C.krusei; C.lusitaniae;
KW C.parapsilosis; C.tropicalis; therapy.
XX
CS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 12
FT /note= "amidated"
XX
PN WO9608509-A1.
XX
PD 21-MAR-1996.
XX
PF 20-JUL-1995; 95WO-US09262.
XX
PR 13-JAN-1995; 95US-0372105.
PR 15-SEP-1994; 94US-0306473.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1996-179900/18.
XX
PT Antifungal peptide(s) derived from Domain III of BPI protein - used
PT in vitro for killing or inhibiting replication of fungi, esp.
PT Candida species
XX
PS Claim 5; Page 138; 199pp; English.
XX
CC AAW04000-W04160 represent antifungal peptides. These sequences are
CC based on (or derived from) Domain III of the
CC bactericidal/permeability-increasing protein (BPI). BPI is a protein
CC that can be isolated from the granules of mammalian polymorphonuclear
CC leukocytes (PMNs or neutrophils). These antifungal peptides can be used
CC for killing, or inhibiting replication of, fungi in vitro. These
CC sequences can also be used for treatment of a fungal infection involving
CC fungi from the species Candida, Aspergillus and Cryptococcus. The
CC sequences are especially useful for treating C.albicans, C.galabrat,
CC C.krusei, C.lusitaniae, C.parapsilosis and C.tropicalis infections.
XX
SQ Sequence 12 AA;

Query Match 100.0%; Score 57; DB 17; Length 12;
Best Local Similarity 100.0%; Pred. No. 0.0019;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
Db 3 KWLIQLFHKK 12

RESULT 94
AAW43708
ID AAW43708 standard; peptide; 12 AA.
XX
AC AAW43708;
XX
DT 20-APR-1998 (first entry)
XX
DE Bactericidal/permeability increasing peptide XMP.286.
XX
KW Bactericidal/permeability increasing peptide; BPI; fusion protein;
KW bacterial infection; fungal infection; endotoxin; heparin;
KW angiogenesis; fungicidal; recombinant DNA; vector.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 12
FT /note= "Amidated"
XX
PN WO9735009-A1.
XX
PD 25-SEP-1997.
XX
PF 18-MAR-1997; 97WO-US05287.
XX
PR 22-MAR-1996; 96US-0621803.
XX
PA (XOMA) XOMA CORP.
XX
PI Better MD;
XX
DR WPI; 1997-480215/44.
XX
PT Recombinant production of bactericidal/permeability increasing
PT protein - by expression as a fusion protein in microbial host cells,
PT then cleaving the BPI peptide from the carrier
XX
PS Claim 10; Page 110; 186pp; English.
XX
CC A new recombinant DNA vector construct has been developed which encodes
CC a fusion protein and is suitable for introduction into a bacterial host.
CC The vector comprises: (a) DNA encoding at least one cationic
CC bactericidal/permeability increasing peptide (BPI), (b) DNA encoding a
CC carrier protein, and (c) DNA encoding an amino acid (aa) cleavage site
CC located between (a) and (b). The present sequence represents a
CC specifically claimed BPI peptide. The peptides have many uses including
CC the treatment of bacterial and fungal infections. BPI peptides also
CC bind to endotoxins and heparin, neutralising their effects. The
CC peptides have further been shown to inhibit angiogenesis (partly due to
CC heparin-binding activity). The fusion proteins have been found to be
CC expressed in large amounts without significant proteolysis, and in some
CC cases are actually secreted from the host cells. This allows the
CC indirect production of anti-microbial BPI peptides in microbial hosts.
XX
SQ Sequence 12 AA;

Query Match 100.0%; Score 57; DB 18; Length 12;
Best Local Similarity 100.0%; Pred. No. 0.0019;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
Db 3 KWLIQLFHKK 12

RESULT 95
AAW44518
ID AAW44518 standard; peptide; 12 AA.
XX
AC AAW44518;
XX
DT 27-APR-1998 (first entry)
XX
DE Anti-fungal peptide #119 based on BPI protein (residues 142-169).
XX
KW Anti-fungal peptide; bactericidal-permeability-increasing protein; BPI;
KW polymorphonuclear leukocyte; fungicide.
XX
OS Synthetic.
OS Mammalia.
XX
FH Key Location/Qualifiers
FT Modified-site 12
FT /note= "C-terminal amide"
XX
PN WO9704008-A1.
XX
PD 06-FEB-1997.
XX
PF 21-MAR-1996; 96WO-US03845.
XX

PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1997-132578/12.
XX
PT Anti-fungal peptide(s) derived from or based on domain III of
PT bactericidal-permeability-increasing protein - are used in vitro or
PT in vivo as a fungicides
XX
PS Claim 1; Page 175; 230pp; English.
XX
CC This is a specifically claimed anti-fungal peptide which is based on
CC domain III (amino acids 142-160) of bactericidal-permeability-increasing
CC protein (BPI), isolated from the granules of mammalian polymorphonuclear
CC leukocytes. It is used in compositions with diluents, carriers or
CC adjuvants to treat fungal infections in patients. It may also be used in
CC vitro to kill or inhibit the replication of fungi, such as in
CC decontaminating fluids and sterilising medical and implant devices.
XX
SQ Sequence 12 AA;

Query Match 100.0%; Score 57; DB 18; Length 12;
Best Local Similarity 100.0%; Pred. No. 0.0019;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 3 KWLIQLFHKK 12

RESULT 96
AAY00495
ID AAY00495 standard; Peptide; 12 AA.
XX
AC AAY00495;
XX
DT 07-MAY-1999 (first entry)
XX
DE Antifungal peptide XMP.286.
XX
KW Antifungal; BPI; bactericidal/permeability increasing protein;
KW Candida infection.
XX
OS Synthetic.
XX
PN US5858974-A.
XX
PD 12-JAN-1999.
XX
PF 21-MAR-1996; 96US-0621259.
XX
PR 21-MAR-1996; 96US-0621259.
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1999-119956/10.
XX
PT Antifungal peptides - comprising part of bactericidal or
PT permeability-increasing protein sequence or related sequence
XX
PS Disclosure; Columns 139-140; 132pp; English.
XX
CC New peptides are provided which are based on Domain III (amino acids
CC 142-169) of human bactericidal/permeability-increasing protein (BPI).
CC The peptides all have a C-terminal amide. More particularly, the Claims
CC relate to: (1) a peptide that has an amino acid sequence of human BPI
CC from position 148 to position 161 (KSKVGWLIQLFHKK) and variants of the
CC sequence having antifungal activity; and (2) an antifungal peptide
CC having 6-14 amino acids comprising (a) a core sequence selected from
CC LIQL, IQLF, WLIQL, LIQLF and WLIQLF and (b) one or more cationic amino
CC acids selected from K, R, H, Orn (ornithine) and Dab (diaminobutyric
CC acid) at the N and/or C terminus of the core sequence. The new peptides
CC are used for killing or inhibiting replication of fungi in vitro; and
CC for treating fungal infections in vivo, in particular infections of
CC Candida, Aspergillus or Cryptococcus spp., especially C. albicans, C.
CC krusei, C. lusitaniae, C. parapsilosis or C. tropicalis. The peptide
CC can be administered topically, intravenously, orally or as an aerosol,
CC optionally together with a non-peptide antifungal agent.
XX
SQ Sequence 12 AA;

Query Match 100.0%; Score 57; DB 20; Length 12;
Best Local Similarity 100.0%; Pred. No. 0.0019;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 3 KWLIQLFHKK 12

RESULT 97
AAB65419
ID AAB65419 standard; Peptide; 12 AA.
XX
AC AAB65419;
XX
DT 27-MAR-2001 (first entry)
XX
DE Anti-fungal peptide XMP.286.
XX
KW Human; BPI; antifungal; polymorphonuclear leukocyte; neutrophil;
KW bactericidal/permeability-increasing protein; bactericidal;
KW fungal infection.
XX
OS Homo sapiens.
XX
PN US6156730-A.
XX
PD 05-DEC-2000.
XX
PF 08-JAN-1999; 99US-0227659.
XX
PR 21-MAR-1996; 96US-0621259.
PR 12-MAR-1993; 93US-0030644.
PR 15-JUL-1993; 93US-0093202.
PR 14-JAN-1994; 94US-0183222.
PR 11-MAR-1994; 94US-0209762.
PR 11-JUL-1994; 94US-0273540.
PR 15-SEP-1994; 94US-0306473.
PR 13-JAN-1995; 95US-0372105.
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Lim E, Fadem MB, Little RG;
XX
DR WPI; 2001-090160/10.
XX
PT Novel anti-fungal peptides derived from domain III of
PT bactericidal/permeability-increasing protein useful for killing or
PT inhibiting replication of fungi and for treating fungal infections -
XX
PS Example 2; Columns 143-144; 134pp; English.
XX
CC The present invention relates to antifungal peptides (see
CC AAB65301-B65550) derived from Domain III (amino acids 142-169) of
CC bactericidal/permeability-increasing protein (BPI). The present sequence
CC is one such antifungal peptide. BPI is a protein isolated from the
CC granules of mammalian polymorphonuclear leukocytes (PMNs or
CC neutrophils). BPI has potent bactericidal activity against a broad range

```
CC   of gram-negative bacteria. The peptides of the present invention are
CC   useful for killing or inhibiting replication of fungi, and treating
CC   infections caused by fungus belonging to Candida, Aspergillus,
CC   Cryptococcus species such as C.albicans, C.glabrata, C.krusei,
CC   C.lusitaniae, C.parapsilosis and C.tropicalis.
XX
SQ   Sequence   12 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 0.0019;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||.|||
Db          3 KWLIQLFHKK 12


RESULT 98
AAW04053
ID   AAW04053 standard; peptide; 13 AA.
XX
AC   AAW04053;
XX
DT   04-NOV-1996  (first entry)
XX
DE   Antifungal peptide XMP.284.
XX
KW   Antifungal peptide; inhibitor; Domain III; polymorphonuclear leukocyte;
KW   bactericidal/permeability-increasing protein; BPI; mammalian; PMN; fungi;
KW   neutrophil; replication inhibitor; fungal infection; Aspergillus;
KW   Cryptococcus; Candida; C.albicans; C.galabrat; C.krusei; C.lusitaniae;
KW   C.parapsilosis; C.tropicalis; therapy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   13
FT                   /note= "amidated"
XX
PN   WO9608509-A1.
XX
PD   21-MAR-1996.
XX
PF   20-JUL-1995;    95WO-US09262.
XX
PR   13-JAN-1995;    95US-0372105.
PR   15-SEP-1994;    94US-0306473.
XX
PA   (XOMA ) XOMA CORP.
XX
PI   Fadem MB,  Lim E,  Little RG;
XX
DR   WPI; 1996-179900/18.
XX
PT   Antifungal peptide(s) derived from Domain III of BPI protein  - used
PT   in vitro for killing or inhibiting replication of fungi, esp.
PT   Candida species
XX
PS   Claim 14; Page 137; 199pp; English.
XX
CC   AAW04000-W04160 represent antifungal peptides. These sequences are
CC   based on (or derived from) Domain III of the
CC   bactericidal/permeability-increasing protein (BPI). BPI is a protein
CC   that can be isolated from the granules of mammalian polymorphonuclear
CC   leukocytes (PMNs or neutrophils). These antifungal peptides can be used
CC   for killing, or inhibiting replication of, fungi in vitro. These
CC   sequences can also be used for treatment of a fungal infection involving
CC   fungi from the species Candida, Aspergillus and Cryptococcus. The
CC   sequences are especially useful for treating C.albicans, C.galabrat,
CC   C.krusei, C.lusitaniae, C.parapsilosis and C.tropicalis infections.
XX
SQ   Sequence   13 AA;

  Query Match             100.0%;  Score 57;  DB 17;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 0.0021;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||.|||
Db          4 KWLIQLFHKK 13


RESULT 99
AAW43706
ID   AAW43706 standard; peptide; 13 AA.
XX
AC   AAW43706;
XX
DT   20-APR-1998  (first entry)
XX
DE   Bactericidal/permeability increasing peptide XMP.284.
XX
KW   Bactericidal/permeability increasing peptide; BPI; fusion protein;
KW   bacterial infection; fungal infection; endotoxin; heparin;
KW   angiogenesis; fungicidal; recombinant DNA; vector.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   13
FT                   /note= "Amidated"
XX
PN   WO9735009-A1.
XX
PD   25-SEP-1997.
XX
PF   18-MAR-1997;    97WO-US05287.
XX
PR   22-MAR-1996;    96US-0621803.
XX
PA   (XOMA ) XOMA CORP.
XX
PI   Better MD;
XX
DR   WPI; 1997-480215/44.
XX
PT   Recombinant production of bactericidal/permeability increasing
PT   protein - by expression as a fusion protein in microbial host cells,
PT   then cleaving the BPI peptide from the carrier
XX
PS   Claim 10; Page 110; 186pp; English.
XX
CC   A new recombinant DNA vector construct has been developed which encodes
CC   a fusion protein and is suitable for introduction into a bacterial host.
CC   The vector comprises: (a) DNA encoding at least one cationic
CC   bactericidal/permeability increasing peptide (BPI), (b) DNA encoding a
CC   carrier protein, and (c) DNA encoding an amino acid (aa) cleavage site
CC   located between (a) and (b). The present sequence represents a
CC   specifically claimed BPI peptide. The peptides have many uses including
CC   the treatment of bacterial and fungal infections. BPI peptides also
CC   bind to endotoxins and heparin, neutralising their effects. The
CC   peptides have further been shown to inhibit angiogenesis (partly due to
CC   heparin-binding activity). The fusion proteins have been found to be
CC   expressed in large amounts without significant proteolysis, and in some
CC   cases are actually secreted from the host cells. This allows the
CC   indirect production of anti-microbial BPI peptides in microbial hosts.
XX
SQ   Sequence   13 AA;

  Query Match             100.0%;  Score 57;  DB 18;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 0.0021;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
```

```
Db          4 KWLIQLFHKK 13


RESULT 100
AAW44516
ID   AAW44516 standard; peptide; 13 AA.
XX
AC   AAW44516;
XX
DT   27-APR-1998  (first entry)
XX
DE   Anti-fungal peptide #117 based on BPI protein (residues 142-169).
XX
KW   Anti-fungal peptide; bactericidal-permeability-increasing protein; BPI;
KW   polymorphonuclear leukocyte; fungicide.
XX
OS   Synthetic.
OS   Mammalia.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   13
FT                   /note= "C-terminal amide"
XX
PN   WO9704008-A1.
XX
PD   06-FEB-1997.
XX
PF   21-MAR-1996;    96WO-US03845.
XX
PR   20-JUL-1995;    95US-0504841.
XX
PA   (XOMA ) XOMA CORP.
XX
PI   Fadem MB,  Lim E,  Little RG;
XX
DR   WPI; 1997-132578/12.
XX
PT   Anti-fungal peptide(s) derived from or based on domain III of
PT   bactericidal-permeability-increasing protein - are used in vitro or
PT   in vivo as a fungicides
XX
PS   Claim 1; Page 174; 230pp; English.
XX
CC   This is a specifically claimed anti-fungal peptide which is based on
CC   domain III (amino acids 142-160) of bactericidal-permeability-increasing
CC   protein (BPI), isolated from the granules of mammalian polymorphonuclear
CC   leukocytes. It is used in compositions with diluents, carriers or
CC   adjuvants to treat fungal infections in patients. It may also be used in
CC   vitro to kill or inhibit the replication of fungi, such as in
CC   decontaminating fluids and sterilising medical and implant devices.
XX
SQ   Sequence   13 AA;

  Query Match             100.0%;  Score 57;  DB 18;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 0.0021;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          4 KWLIQLFHKK 13


RESULT 101
AAY00493
ID   AAY00493 standard; Peptide; 13 AA.
XX
AC   AAY00493;
XX
DT   07-MAY-1999  (first entry)
XX
DE   Antifungal peptide XMP.284.
XX
KW   Antifungal; BPI; bactericidal/permeability increasing protein;
KW   Candida infection.
XX
OS   Synthetic.
XX
PN   US5858974-A.
XX
PD   12-JAN-1999.
XX
PF   21-MAR-1996;    96US-0621259.
XX
PR   21-MAR-1996;    96US-0621259.
PR   20-JUL-1995;    95US-0504841.
XX
PA   (XOMA ) XOMA CORP.
XX
PI   Fadem MB,  Lim E,  Little RG;
XX
DR   WPI; 1999-119956/10.
XX
PT   Antifungal peptides - comprising part of bactericidal or
PT   permeability-increasing protein sequence or related sequence
XX
PS   Disclosure; Columns 137-138; 132pp; English.
XX
CC   New peptides are provided which are based on Domain III (amino acids
CC   142-169) of human bactericidal/permeability-increasing protein (BPI).
CC   The peptides all have a C-terminal amide. More particularly, the Claims
CC   relate to: (1) a peptide that has an amino acid sequence of human BPI
CC   from position 148 to position 161 (KSKVGWLIQLFHKK) and variants of the
CC   sequence having antifungal activity; and (2) an antifungal peptide
CC   having 6-14 amino acids comprising (a) a core sequence selected from
CC   LIQL, IQLF, WLIQL, LIQLF and WLIQLF and (b) one or more cationic amino
CC   acids selected from K, R, H, Orn (ornithine) and Dab (diaminobutyric
CC   acid) at the N and/or C terminus of the core sequence. The new peptides
CC   are used for killing or inhibiting replication of fungi in vitro; and
CC   for treating fungal infections in vivo, in particular infections of
CC   Candida, Aspergillus or Cryptococcus spp., especially C. albicans, C.
CC   krusei, C. lusitaniae, C. parapsilosis or C. tropicalis. The peptide
CC   can be administered topically, intravenously, orally or as an aerosol,
CC   optionally together with a non-peptide antifungal agent.
XX
SQ   Sequence   13 AA;

  Query Match             100.0%;  Score 57;  DB 20;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 0.0021;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          4 KWLIQLFHKK 13


RESULT 102
AAB65417
ID   AAB65417 standard; Peptide; 13 AA.
XX
AC   AAB65417;
XX
DT   27-MAR-2001  (first entry)
XX
DE   Anti-fungal peptide XMP.284.
XX
KW   Human; BPI; antifungal; polymorphonuclear leukocyte; neutrophil;
KW   bactericidal/permeability-increasing protein; bactericidal;
KW   fungal infection.
XX
OS   Homo sapiens.
XX
PN   US6156730-A.
XX
PD   05-DEC-2000.
XX
PF   08-JAN-1999;    99US-0227659.
```

XX
PR 21-MAR-1996; 96US-0621259.
PR 12-MAR-1993; 93US-0030644.
PR 15-JUL-1993; 93US-0093202.
PR 14-JAN-1994; 94US-0183222.
PR 11-MAR-1994; 94US-0209762.
PR 11-JUL-1994; 94US-0273540.
PR 15-SEP-1994; 94US-0306473.
PR 13-JAN-1995; 95US-0372105.
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Lim E, Fadem MB, Little RG;
XX
DR WPI; 2001-090160/10.
XX
PT Novel anti-fungal peptides derived from domain III of
PT bactericidal/permeability-increasing protein useful for killing or
PT inhibiting replication of fungi and for treating fungal infections
XX
PS Example 2; Columns 141-142; 134pp; English.
XX
CC The present invention relates to antifungal peptides (see
CC AAB65301-B65550) derived from Domain III (amino acids 142-169) of
CC bactericidal/permeability-increasing protein (BPI). The present sequence
CC is one such antifungal peptide. BPI is a protein isolated from the
CC granules of mammalian polymorphonuclear leukocytes (PMNs or
CC neutrophils). BPI has potent bactericidal activity against a broad range
CC of gram-negative bacteria. The peptides of the present invention are
CC useful for killing or inhibiting replication of fungi, and treating
CC infections caused by fungus belonging to Candida, Aspergillus,
CC Cryptococcus species such as C.albicans, C.glabrata, C.krusei,
CC C.lusitaniae, C.parapsilosis and C.tropicalis.
XX
SQ Sequence 13 AA;

Query Match 100.0%; Score 57; DB 22; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0021;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 4 KWLIQLFHKK 13

RESULT 103
AAR62100
ID AAR62100 standard; peptide; 14 AA.
XX
AC AAR62100;
XX
DT 25-MAR-2003 (updated)
DT 03-MAY-1995 (first entry)
XX
DE BPI derived peptide, BPI.97.
XX
KW Human; bactericidal/permeability-increasing protein; BPI; heparin;
KW binding agent; neutralisation; anti-coagulant effect; inhibition;
KW angiogenesis; ocular retinopathy; endothelial cell; proliferation;
KW contraception; malignant; tumour cell; inflammatory disease; T-cell;
KW rheumatoid arthritis; gram-negative bacteria; infection; cytokine;
KW lipoarabinomannan; circulation; compromised immune response; microbe;
KW macrophage; activation; lymphokine; decontaminating; Helicobacter;
KW gastritis; peptic ulcer; gastric ulcer; duodenal ulcer; antibiotic;
KW gentamicin; polymyxin B; cefamandole nafate; LBP protein.
XX
OS Homo sapiens.
XX
PN WO9420532-A1.
XX
PD 15-SEP-1994.
XX
PF 11-MAR-1994; 94WO-US02465.
XX
PR 12-MAR-1993; 93US-0030644.
PR 15-JUL-1993; 93US-0093202.
PR 14-JAN-1994; 94US-0183222.
XX
PA (XOMA) XOMA CORP.
XX
PI Little RG;
XX
DR WPI; 1994-302964/37.
XX
PT New human bactericidal permeability increasing peptides - derived
PT from the functional domains of BPI and having BPI activities such
PT as bactericidal activity
XX
PS Claim 11; Page 160; 254pp; English.
XX
CC The sequences given in AAR63682-750, AAR62087-100 and AAR62491-500 are
CC peptides derived from human bactericidal/permeability-increasing
CC protein (BPI). The sequences given in AAR63736-50 and AAR62087-100 are
CC derived from positions 142-169 of BPI. Peptides such as these may
CC be used as heparin binding agents, for neutralising the anti-coagulant
CC effect of heparin, for inhibiting angiogenesis, eg. associated with
CC ocular retinopathy, for inhibiting endothelial cell proliferation, for
CC contraception, for inhibiting malignant tumour cell proliferation,
CC for treating a chronic inflammatory disease state, eg. rheumatoid
CC arthritis, and for treating gram-negative bacterial infection. The
CC peptides may also be used for treating a subject suffering from the
CC adverse effects of the presence of lipoarabinomannan in the circulation,
CC eg. a compromised immune response to microbes or tumour cells due to
CC inhibition of macrophage activation by T-cell lymphokines or increased
CC production of a cytokine, for decontaminating a fluid containing
CC lipoarabinomannan or for treating a disease associated with Helicobacter
CC infection, eg. gastritis, peptic ulcer, gastric ulcer or duodenal ulcer.
CC The peptides can be used with an antibiotic eg. gentamicin, polymyxin B
CC or cefamandole nafate or LBP protein products. The peptides are pref.
CC prepared by solid phase synthesis.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 14 AA;

Query Match 100.0%; Score 57; DB 15; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.0023;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 5 KWLIQLFHKK 14

RESULT 104
AAR78006
ID AAR78006 standard; peptide; 14 AA.
XX
AC AAR78006;
XX
DT 09-SEP-1996 (first entry)
XX
DE BPI protein segment 148-161 Lys 152 (G) (XMP.97).
XX
KW Active domain fragment; human; BPI; treatment; infection; SGBP;
KW bacterial permeability increasing holoprotein; L-phase variant;
KW susceptible gram-positive bacteria; antibiotic; mycoplasma;
KW cell wall disruption; Staphylococcus aureus;
KW Streptococcus pneumonide; Enterococcus faecalis;
KW radial diffusion assay.
XX
OS Synthetic.
XX
PN WO9519180-A1.
XX
PD 20-JUL-1995.

XX
PF 13-JAN-1995; 95WO-US00656.
XX
PR 11-JUL-1994; 94US-0274299.
PR 14-JAN-1994; 94US-0183222.
PR 11-MAR-1994; 94US-0209762.
XX
PA (XOMA) XOMA CORP.
XX
PI Horowitz A, Lambert LH, Little RG;
XX
DR WPI; 1995-263714/34.
XX
PT Treatment of a susceptible gram-positive bacterial infection - using
PT a bactericidal permeability increasing peptide and an antibiotic
XX
PS Example 8; Page 165; 264pp; English.
XX
CC The present peptide is an active domain fragment of the human
CC bacterial permeability increasing (BPI) holoprotein, which may be
CC used to treat a susceptible gram-positive bacterial (SGPB)
CC infection. BPI fragments, opt. in synergy with antibiotics, kill
CC SGBP by disrupting their cell walls, where the SGBP are esp.
CC L-phase variants of Staphylococcus aureus, Streptococcus
CC pneumonide or Enterococcus faecalis, or mycoplasma. The in vitro
CC effects of the peptide on S. aureus can be determined by using a
CC radial diffusion assay, the result of which, given as the no. of
CC pmol of peptide required to establish a 30 mm square area of
CC growth inhibition, was no detectable activity up to 5 microg/well.
XX
SQ Sequence 14 AA;

Query Match 100.0%; Score 57; DB 16; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.0023;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 5 KWLIQLFHKK 14

RESULT 105
AAR81070
ID AAR81070 standard; Peptide; 14 AA.
XX
AC AAR81070;
XX
DT 09-MAY-1996 (first entry)
XX
DE BPI.97, domain III derived peptide (single amino acid substitution).
XX
KW bactericidal/permeability increasing peptide; BPI; heparin; binding;
KW neutralisation; lipopolysaccharide; LPS; bactericidal activity;
KW treatment; neutralise endotoxin; inhibit angiogenesis;
KW inhibit tumour formation; proliferation.
XX
OS Synthetic.
XX
PN WO9519372-A1.
XX
PD 20-JUL-1995.
XX
PF 15-SEP-1994; 94WO-US10427.
XX
PR 11-MAR-1994; 94US-0209762.
PR 14-JAN-1994; 94US-0183222.
XX
PA (XOMA) XOMA CORP.
XX
PI Little RG;
XX
DR WPI; 1995-263828/34.
XX
PT New peptide(s) based on bactericidal/permeability-increasing protein
PT - having heparin binding and neutralisation, LPS binding and
PT neutralisation and antimicrobial activities
XX
PS Claim 3; Page 54; 275pp; English.
XX
CC BPI (bactericidal permeability-increasing) peptides (AAR80996-81081 and
CC AAR82553-372) each have an amino acid sequence that is deriv. of a BPI
CC functional domain (or a variant) having at least one of the biological
CC activities of BPI, such as heparin binding or neutralisation;
CC lipopolysaccharide (LPS) binding or neutralisation or bactericidal
CC activity. The BPI peptides are based on the amino-terminal portion of
CC BPI, esp. functional domains I, II, and III (BPI residues 17-45, 65-99
CC and 142-169 resp.).
XX
SQ Sequence 14 AA;

Query Match 100.0%; Score 57; DB 16; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.0023;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 5 KWLIQLFHKK 14

RESULT 106
AAR81083
ID AAR81083 standard; peptide; 14 AA.
XX
AC AAR81083;
XX
DT 13-MAR-1996 (first entry)
XX
DE Anti-fungal BPI peptide fragment XMP.97.
XX
KW Bactericidal/permeability increasing protein; BPI; granule; mammalian;
KW polymorphonuclear neutrophil; anti-bacterial; fungus; infection;
KW antifungal; fluconazole; amphotericin B; Candida albicans; sterilise;
KW lipopolysaccharide binding protein; sterilisation; medical instrument.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Misc-feature 5
FT /note= "amino acid substittution from wild type seq.:
FT Lys replaces Gly"
XX
PN WO9519179-A1.
XX
PD 20-JUL-1995.
XX
PF 13-JAN-1995; 95WO-US00498.
XX
PR 11-JUL-1994; 94US-0273540.
PR 14-JAN-1994; 94US-0183222.
PR 11-MAR-1994; 94US-0209762.
PR 11-JUL-1994; 94US-0273540.
XX
PA (XOMA) XOMA CORP.
XX
PI Little RG, Lambert LH, Lim E, Scannon PJ;
XX
DR WPI; 1995-263713/34.
XX
PT Treating fungal infection with bactericidal permeability increasing
PT protein or deriv. - esp. for control of systemic Candida albicans
PT infection or for use in in vitro sterilisation
XX
PS Claim 15; Page 82; 153pp; English.
XX
CC The peptides AAR81083-4, AAR81088-R81244 and AAR81248-R81308 are examples
CC of peptides derived from the sequence of a bactericidal/permeability

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CC   increasing (BPI) protein. BPI proteins are isolated from the granules
CC   of mammalian polymorphonuclear neutrophils (PMN). The peptides are
CC   derived from the sequence of an isolated BPI holoprotein (AAR81245).
CC   They are especially based on the 3 antibacterial functional domains: I
CC   (AAR81085), II (AAR81086) and III (AAR81087) present in N-terminal region
CC   of the BPI holoprotein. The peptides are used to treat fungal infections
CC   together with other antifungal cpds e.g. fluconazole or amphotericin B.
CC   The antifungal activity of the peptides may also be enhanced by addition
CC   of a lipopolysaccharide binding protein (LBP) e.g. AAR81246. The
CC   peptides can be used to treat fungal infection, esp. Candida albicans.
CC   They are also useful for killing or inhibiting fungi in vitro e.g for
CC   sterilising medical instruments. This peptide corresponds to residues
CC   148-161 of the holoprotein.
XX
SQ   Sequence   14 AA;

  Query Match             100.0%;  Score 57;  DB 16;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 0.0023;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          5 KWLIQLFHKK 14


RESULT 107
AAR86546
ID   AAR86546 standard; peptide; 14 AA.
XX
AC   AAR86546;
XX
DT   15-MAR-1996  (first entry)
XX
DE   BPI.97 for use in treating liver damage.
XX
KW   BPI; bactericidal permeability increasing protein; RES;
KW   reticuloendothelial; Kupffer cells; liver insult; hepatotoxic;
KW   hepatectomy; trauma; viral hepatitis; chronic inflammatory.
XX
OS   Synthetic.
XX
PN   WO9510297-A1.
XX
PD   20-APR-1995.
XX
PF   05-OCT-1994;   94WO-US11404.
XX
PR   15-OCT-1993;   93US-0132513.
XX
PA   (XOMA ) XOMA CORP.
XX
PI   Boermeester MA,  Van Leeuwen PAM;
XX
DR   WPI; 1995-161572/21.
XX
PT   Use of bactericidal/permeability-increasing protein prods. - for
PT   treating adverse physiological effects of a depressed
PT   reticuloendothelial system function.
XX
PS   Claims 6,13; Page 71; 136pp; English.
XX
CC   The patent relates to the new use of a BPI protein product for treating
CC   adverse effects associated with depressed reticuloendothelial system
CC   function, especially diminished function of Kupffer cells of the liver
CC   resulting from physical, chemical or biological insult. Physical insult
CC   is exemplified by partial or total hepatectomy such as accompanies
CC   transplantation, and trauma. Chemical insult is exemplified by the
CC   results of exposure to hepatotoxic substances such as chloroform,
CC   glucosamine, carbon tetrachloride and ethanol. Biological insult is
CC   exemplified by (non-)infectious diseases such as viral hepatitis and
CC   chronic inflammatory hepatitis. The BPI protein product is preferably
CC   rBPI-23, rBPI-21, rBPI, rBPI-42 dimer or one of 222 specified BPI
CC   peptides. The present sequence is one of the specified peptides.
XX
SQ   Sequence   14 AA;

  Query Match             100.0%;  Score 57;  DB 16;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 0.0023;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          5 KWLIQLFHKK 14


RESULT 108
AAR76333
ID   AAR76333 standard; peptide; 14 AA.
XX
AC   AAR76333;
XX
DT   25-JAN-1996  (first entry)
XX
DE   Bacterial permeability-increasing  peptide BPI.97.
XX
KW   BPI peptide; bacterial permeability-increasing peptide; bactericidal;
KW   therapeutic effectiveness; antibiotic; concurrent administration;
KW   reverse resistance; gram-negative bacteria.
XX
OS   Homo sapiens.
XX
PN   WO9508344-A1.
XX
PD   30-MAR-1995.
XX
PF   22-SEP-1994;   94WO-US11225.
XX
PR   22-SEP-1993;   93US-0125651.
PR   11-JUL-1994;   94US-0273401.
XX
PA   (XOMA ) XOMA CORP.
XX
PI   Cohen J,  Kung AHC,  Lambert LH,  Little RG;
XX
DR   WPI; 1995-161465/21.
XX
PT   BPI protein and an antibiotic in a medicament - for treatment of
PT   gram-negative bacterial infection
XX
PS   Example 24; Page 170; 259pp; English.
XX
CC   BPI (bacterial permeability-increasing) peptides (AAR76244-458) were
CC   screened for bactericidal effects on E. coli strains J5 and 0111:B4
CC   in a radial diffusion assay. BPI peptides which retain antibacterial
CC   activity are expected to improve the therapeutic effectiveness of
CC   antibiotics when concurrently administered. Concurrent administration
CC   of BPI protein products and antibiotics is shown to reverse resistance
CC   of a variety of gram-negative organisms to antibiotics.
XX
SQ   Sequence   14 AA;

  Query Match             100.0%;  Score 57;  DB 16;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 0.0023;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          5 KWLIQLFHKK 14


RESULT 109
AAW05943
ID   AAW05943 standard; peptide; 14 AA.
XX
AC   AAW05943;
XX
```

DT 25-MAR-2003 (updated)
DT 18-DEC-1996 (first entry)
XX
DE Recombinant BPI peptide BPI.97.
XX
KW Lipopolysaccharide binding protein; synergist; BPI; enhancement;
KW bactericidal/permeability increasing protein; potentiation; surgery;
KW Gram negative; bacterial infections; disinfection; sterilisation;
KW antibiotic; E.coli; polymorphonuclear leukocyte; mammalian.
XX
OS Synthetic.
XX
PN US5523288-A.
XX
PD 04-JUN-1996.
XX
PF 22-SEP-1994; 94US-0311611.
XX
PR 22-SEP-1994; 94US-0311611.
PR 22-SEP-1993; 93US-0125651.
PR 11-JUL-1994; 94US-0273401.
XX
PA (XOMA) XOMA CORP.
XX
PI Cohen J, Kung AHC, Lambert LH, Little RG;
XX
DR WPI; 1996-285780/29.
XX
PT Compsn. for treating Gram negative bacterial infection - contg.
PT antibiotic and bactericidal-permeability increasing protein as
PT synergist
XX
PS Example 24; Column 127-128; 138pp; English.
XX
CC The peptides AAW05853-W06074 are derived from the
CC bactericidal/permeability increasing (BPI) protein (AAW05852). The
CC peptides were screened for bactericidal activity against E.coli strains
CC J5 and 0111:B4 in a radial diffusion assay. The BPI peptides can be used
CC to enhance the antibiotic treatment of Gram -ve bacterial infections,
CC prophylactically for patients about to undergo surgery or for
CC disinfection or sterilisation. Administration of the BPI peptides
CC together with an antibiotic results in synergistic or potentiating
CC bactericidal effects greater than the effect of the individual peptide or
CC antibiotic. Also the BPI peptides can reverse the resistance of certain
CC Gram -ve bacteria to certain antibiotics e.g. carbenicillin, cefazolin.
CC (Updated on 25-MAR-2003 to correct PF field.)
XX
SQ Sequence 14 AA;

Query Match 100.0%; Score 57; DB 17; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.0023;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 5 KWLIQLFHKK 14

RESULT 110
AAW04091
ID AAW04091 standard; peptide; 14 AA.
XX
AC AAW04091;
XX
DT 04-NOV-1996 (first entry)
XX
DE Antifungal peptide XMP.97.
XX
KW Antifungal peptide; inhibitor; Domain III; polymorphonuclear leukocyte;
KW bactericidal/permeability-increasing protein; BPI; mammalian; PMN; fungi;
KW neutrophil; replication inhibitor; fungal infection; Aspergillus;
KW Cryptococcus; Candida; C.albicans; C.galabrat; C.krusei; C.lusitaniae;
KW C.parapsilosis; C.tropicalis; therapy.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 14
FT /note= "amidated"
XX
PN WO9608509-A1.
XX
PD 21-MAR-1996.
XX
PF 20-JUL-1995; 95WO-US09262.
XX
PR 13-JAN-1995; 95US-0372105.
PR 15-SEP-1994; 94US-0306473.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1996-179900/18.
XX
PT Antifungal peptide(s) derived from Domain III of BPI protein - used
PT in vitro for killing or inhibiting replication of fungi, esp.
PT Candida species
XX
PS Example 2; Page 99; 199pp; English.
XX
CC AAW04000-W04160 represent antifungal peptides. These sequences are
CC based on (or derived from) Domain III of the
CC bactericidal/permeability-increasing protein (BPI). BPI is a protein
CC that can be isolated from the granules of mammalian polymorphonuclear
CC leukocytes (PMNs or neutrophils). These antifungal peptides can be used
CC for killing, or inhibiting replication of, fungi in vitro. These
CC sequences can also be used for treatment of a fungal infection involving
CC fungi from the species Candida, Aspergillus and Cryptococcus. The
CC sequences are especially useful for treating C.albicans, C.galabrat,
CC C.krusei, C.lusitaniae, C.parapsilosis and C.tropicalis infections.
XX
SQ Sequence 14 AA;

Query Match 100.0%; Score 57; DB 17; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.0023;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 5 KWLIQLFHKK 14

RESULT 111
AAW43642
ID AAW43642 standard; peptide; 14 AA.
XX
AC AAW43642;
XX
DT 20-APR-1998 (first entry)
XX
DE Bactericidal/permeability increasing peptide XMP.97.
XX
KW Bactericidal/permeability increasing peptide; BPI; fusion protein;
KW bacterial infection; fungal infection; endotoxin; heparin;
KW angiogenesis; fungicidal; recombinant DNA; vector.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 14
FT /note= "Amidated"
XX
PN WO9735009-A1.
XX

PD 25-SEP-1997.
XX
PF 18-MAR-1997; 97WO-US05287.
XX
PR 22-MAR-1996; 96US-0621803.
XX
PA (XOMA) XOMA CORP.
XX
PI Better MD;
XX
DR WPI; 1997-480215/44.
XX
PT Recombinant production of bactericidal/permeability increasing
PT protein - by expression as a fusion protein in microbial host cells,
PT then cleaving the BPI peptide from the carrier
XX
PS Claim 10; Page 85; 186pp; English.
XX
CC A new recombinant DNA vector construct has been developed which encodes
CC a fusion protein and is suitable for introduction into a bacterial host.
CC The vector comprises: (a) DNA encoding at least one cationic
CC bactericidal/permeability increasing peptide (BPI), (b) DNA encoding a
CC carrier protein, and (c) DNA encoding an amino acid (aa) cleavage site
CC located between (a) and (b). The present sequence represents a
CC specifically claimed BPI peptide. The peptides have many uses including
CC the treatment of bacterial and fungal infections. BPI peptides also
CC bind to endotoxins and heparin, neutralising their effects. The
CC peptides have further been shown to inhibit angiogenesis (partly due to
CC heparin-binding activity). The fusion proteins have been found to be
CC expressed in large amounts without significant proteolysis, and in some
CC cases are actually secreted from the host cells. This allows the
CC indirect production of anti-microbial BPI peptides in microbial hosts.
XX
SQ Sequence 14 AA;

Query Match 100.0%; Score 57; DB 18; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.0023;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 5 KWLIQLFHKK 14

RESULT 112
AAW44430
ID AAW44430 standard; peptide; 14 AA.
XX
AC AAW44430;
XX
DT 27-APR-1998 (first entry)
XX
DE Anti-fungal peptide #31 based on BPI protein (residues 142-169).
XX
KW Anti-fungal peptide; bactericidal-permeability-increasing protein; BPI;
KW polymorphonuclear leukocyte; fungicide.
XX
OS Synthetic.
OS Mammalia.
XX
FH Key Location/Qualifiers
FT Modified-site 14
FT /note= "C-terminal amide"
XX
PN WO9704008-A1.
XX
PD 06-FEB-1997.
XX
PF 21-MAR-1996; 96WO-US03845.
XX
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1997-132578/12.
XX
PT Anti-fungal peptide(s) derived from or based on domain III of
PT bactericidal-permeability-increasing protein - are used in vitro or
PT in vivo as a fungicides
XX
PS Claim 1; Page 136; 230pp; English.
XX
CC This is a specifically claimed anti-fungal peptide which is based on
CC domain III (amino acids 142-160) of bactericidal-permeability-increasing
CC protein (BPI), isolated from the granules of mammalian polymorphonuclear
CC leukocytes. It is used in compositions with diluents, carriers or
CC adjuvants to treat fungal infections in patients. It may also be used in
CC vitro to kill or inhibit the replication of fungi, such as in
CC decontaminating fluids and sterilising medical and implant devices.
XX
SQ Sequence 14 AA;

Query Match 100.0%; Score 57; DB 18; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.0023;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 5 KWLIQLFHKK 14

RESULT 113
AAW63394
ID AAW63394 standard; peptide; 14 AA.
XX
AC AAW63394;
XX
DT 16-SEP-1998 (first entry)
XX
DE Human BPI protein derived peptide XMP.97.
XX
KW Human; bactericidal/permeability increasing protein; BPI;
KW polymorphonuclear leukocyte; neutrophil; treatment;
KW gram-positive bacteria; antibiotic; Bacillus subtilis;
KW Staphylococcal aureus; S. epidermidis; S. hominis; S. scirui;
KW S. saprophyticus; S. haemolyticus; S. hyicus; S. intermedius;
KW S. simulans; Streptococcus pneumoniae; S. pyogenes; S. agalactia;
KW S. bovis; Enterococcus faecalis; E. faecium; E. galinarum; E. raffinosus;
KW E. casseliflavus; E. durans; infection.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US5783561-A.
XX
PD 21-JUL-1998.
XX
PF 25-NOV-1996; 96US-0758116.
XX
PR 13-JAN-1995; 95US-0372783.
PR 14-JAN-1994; 94US-0183222.
PR 11-MAR-1994; 94US-0209762.
PR 11-JUL-1994; 94US-0274299.
XX
PA (XOMA) XOMA CORP.
XX
PI Horwitz A, Lambert LH, Little RG;
XX
DR WPI; 1998-427075/36.
XX
PT Anti-gram-positive bacteria treatment - uses recombinant
PT bactericidal permeability increasing protein product
XX
PS Example 8; Columns 123-124; 148pp; English.

XX
CC Peptides AAW63307-463 are derived from the human
CC bactericidal/permeability increasing (BPI) protein. The effects of these
CC peptides on Staphylococcus aureus was tested in an in vitro radial
CC diffusion assay. BPI is a protein isolated from the granules of
CC polymorphonuclear leucocytes (neutrophils). It is thought that they bind
CC to lipopolysaccharide structures on bacterial cell walls and activate the
CC degradative enzymes of the bacteria. The specification describes a method
CC for treating a subject infected with a gram-positive bacterial species
CC with a antibiotic, where the bacterial species is one of Bacillus
CC subtilis, Staphylococcal aureus, S. epidermidis, S. hominis, S. sciuri,
CC S. saphrophyticus, S. hyicus, S. haemolyticus, S. intermedius, S.
CC simulans, Streptococcus pneumoniae, S. pyogenes, S. agalactia, S. bovis,
CC Enterococcus faecalis, E. faecium, E. galinarum, E. raffinosus, E.
CC casseliflavus or E. durans, and BPI protein product to increase the
CC susceptibility of the bacterial species to the antibiotic. The methods
CC are useful for treating gram-positive bacterial infections with
CC antibiotics enhanced by recombinant BPI proteins.
XX
SQ Sequence 14 AA;

Query Match 100.0%; Score 57; DB 19; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.0023;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 5 KWLIQLFHKK 14

RESULT 114
AAY00407
ID AAY00407 standard; Peptide; 14 AA.
XX
AC AAY00407;
XX
DT 07-MAY-1999 (first entry)
XX
DE Antifungal peptide XMP.97.
XX
KW Antifungal; BPI; bactericidal/permeability increasing protein;
KW Candida infection.
XX
OS Synthetic.
XX
PN US5858974-A.
XX
PD 12-JAN-1999.
XX
PF 21-MAR-1996; 96US-0621259.
XX
PR 21-MAR-1996; 96US-0621259.
PR 20-JUL-1995; 95US-0504841.
XX
PA (XOMA) XOMA CORP.
XX
PI Fadem MB, Lim E, Little RG;
XX
DR WPI; 1999-119956/10.
XX
PT Antifungal peptides - comprising part of bactericidal or
PT permeability-increasing protein sequence or related sequence
XX
PS Disclosure; Columns 73-74; 132pp; English.
XX
CC New peptides are provided which are based on Domain III (amino acids
CC 142-169) of human bactericidal/permeability-increasing protein (BPI).
CC The peptides all have a C-terminal amide. More particularly, the Claims
CC relate to: (1) a peptide that has an amino acid sequence of human BPI
CC from position 148 to position 161 (KSKVGWLIQLFHKK) and variants of the
CC sequence having antifungal activity; and (2) an antifungal peptide
CC having 6-14 amino acids comprising (a) a core sequence selected from
CC LIQL, IQLF, WLIQL, LIQLF and WLIQLF and (b) one or more cationic amino
CC acids selected from K, R, H, Orn (ornithine) and Dab (diaminobutyric
CC acid) at the N and/or C terminus of the core sequence. The new peptides
CC are used for killing or inhibiting replication of fungi in vitro; and
CC for treating fungal infections in vivo, in particular infections of
CC Candida, Aspergillus or Cryptococcus spp., especially C. albicans, C.
CC krusei, C. lusitaniae, C. parapsilosis or C. tropicalis. The peptide
CC can be administered topically, intravenously, orally or as an aerosol,
CC optionally together with a non-peptide antifungal agent.
XX
SQ Sequence 14 AA;

Query Match 100.0%; Score 57; DB 20; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.0023;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 5 KWLIQLFHKK 14

RESULT 115
AAB16132
ID AAB16132 standard; Peptide; 14 AA.
XX
AC AAB16132;
XX
DT 20-OCT-2000 (first entry)
XX
DE Bactericidal/permeability-increasing protein fragment SEQ ID #92.
XX
KW Gram positive bacterial infections; treat; antibiotic; bacteraemia;
KW bactericidal/permeability increasing protein; BPI; fever; hypotension;
KW shock; metabolic acidosis; disseminated intravascular coagulation;
KW clotting disorder; anaemia; thrombocytopaenia; leukopaenia;
KW adult respiratory distress syndrome; pulmonary disorders; renal failure;
KW hepatobiliary disease; central nervous system disorders.
XX
OS Homo sapiens.
XX
PN US6054431-A.
XX
PD 25-APR-2000.
XX
PF 20-JUL-1998; 98US-0119263.
XX
PR 13-JAN-1995; 95US-0372783.
PR 25-NOV-1996; 96US-0758116.
PR 14-JAN-1994; 94US-0183222.
PR 11-MAR-1994; 94US-0209762.
PR 11-JUL-1994; 94US-0274299.
XX
PA (XOMA) XOMA CORP.
XX
PI Horwitz A, Lambert LH, Little RG;
XX
DR WPI; 2000-338505/29.
XX
PT Treating gram positive bacterial infections such as bacteraemia, fever,
PT shock by administering antibiotics such as penicillin, cephalosporin
PT concurrently with a bactericidal/permeability increasing protein
PT product -
XX
PS Example 8; Column 123-124; 148pp; English.
XX
CC This invention relates to a method for treating gram positive bacterial
CC infections. The method comprises administering antibiotics such as
CC penicillin, cephalosporin, imipenem, monobactam, aminoglycoside,
CC tetracycline, sulfonamide, trimethoprim/sulfonamide, fluoroquinolone,
CC macrolide, vancomycin, polymyxin, chloramphenicol or lincosamide
CC concurrently with a bactericidal/permeability increasing (BPI) protein
CC product. The method can be used for treating subjects suffering from
CC gram positive bacterial infections such as bacteraemia, fever,
CC hypotension, shock, metabolic acidosis, disseminated intravascular

```
CC   coagulation and related clotting disorders, anaemia, thrombocytopaenia,
CC   leukopaenia, adult respiratory distress syndrome and related pulmonary
CC   disorders, renal failure and related renal disorders, hepatobiliary
CC   disease and central nervous system disorders. The treatment method is
CC   effective even for gram positive organisms that are not susceptible to
CC   the direct bactericidal or growth inhibitory effects of BPI. The BPI
CC   protein products and antibiotics provide additive and synergistic
CC   bactericidal/growth inhibitory effects.
CC   Sequences AAB16041-B06108, AAB16110-B16136, AAB16138-B16183, and
CC   AAB16185-B16265 represent peptide fragments of human BPI, used in the
CC   method of the invention. The peptides are derived from the human BPI gene
CC   and protein sequences (see AAA62832, AAB16109 and AAB16184).
CC   Lipopolysaccharide binding protein fragments (see AAB16266-B16267) may be
CC   used in the invention as an alternative to BPI fragments, derived from
CC   the LBP gene and protein sequences (see AAA62831 and AAB16137). PCR
CC   primers represented by sequences AAA62833 to AAA63840, are used to
CC   generate the LBP and BPI DNA fragments used in the invention.
XX
SQ   Sequence   14 AA;

  Query Match             100.0%;  Score 57;  DB 21;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 0.0023;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          5 KWLIQLFHKK 14


RESULT 116
AAB65331
ID   AAB65331 standard; Peptide; 14 AA.
XX
AC   AAB65331;
XX
DT   27-MAR-2001  (first entry)
XX
DE   Anti-fungal peptide XMP.97.
XX
KW   Human; BPI; antifungal; polymorphonuclear leukocyte; neutrophil;
KW   bactericidal/permeability-increasing protein; bactericidal;
KW   fungal infection.
XX
OS   Homo sapiens.
XX
PN   US6156730-A.
XX
PD   05-DEC-2000.
XX
PF   08-JAN-1999;   99US-0227659.
XX
PR   21-MAR-1996;   96US-0621259.
PR   12-MAR-1993;   93US-0030644.
PR   15-JUL-1993;   93US-0093202.
PR   14-JAN-1994;   94US-0183222.
PR   11-MAR-1994;   94US-0209762.
PR   11-JUL-1994;   94US-0273540.
PR   15-SEP-1994;   94US-0306473.
PR   13-JAN-1995;   95US-0372105.
PR   20-JUL-1995;   95US-0504841.
XX
PA   (XOMA ) XOMA CORP.
XX
PI   Lim E,  Fadem MB,  Little RG;
XX
DR   WPI; 2001-090160/10.
XX
PT   Novel anti-fungal peptides derived from domain III of
PT   bactericidal/permeability-increasing protein useful for killing or
PT   inhibiting replication of fungi and for treating fungal infections -
XX
PS   Example 2; Columns 73-74; 134pp; English.
XX
CC   The present invention relates to antifungal peptides (see
CC   AAB65301-B65550) derived from Domain III (amino acids 142-169) of
CC   bactericidal/permeability-increasing protein (BPI). The present sequence
CC   is one such antifungal peptide. BPI is a protein isolated from the
CC   granules of mammalian polymorphonuclear leukocytes (PMNs or
CC   neutrophils). BPI has potent bactericidal activity against a broad range
CC   of gram-negative bacteria. The peptides of the present invention are
CC   useful for killing or inhibiting replication of fungi, and treating
CC   infections caused by fungus belonging to Candida, Aspergillus,
CC   Cryptococcus species such as C.albicans, C.glabrata, C.krusei,
CC   C.lusitaniae, C.parapsilosis and C.tropicalis.
XX
SQ   Sequence   14 AA;

  Query Match             100.0%;  Score 57;  DB 22;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 0.0023;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          5 KWLIQLFHKK 14


RESULT 117
AAB52302
ID   AAB52302 standard; Peptide; 14 AA.
XX
AC   AAB52302;
XX
DT   22-FEB-2001  (first entry)
XX
DE   Peptide BPI 97.
XX
KW   Bactericidal/permeability increasing protein; BPI protein; antibiotic;
KW   antipyretic; antibacterial; immunosuppressive; vasotropic; antianaemic;
KW   immunostimulant; haemostatic; hypotensive; thrombolytic;
KW   protein synthesis inhibitor; gram-negative bacteria; sepsis; hypotension;
KW   shock; clotting disorder; anaemia; pulmonary disorder; renal disorder;
KW   hepatobiliary disease; central nervous system disorder.
XX
OS   Unidentified.
XX
PN   US6140306-A.
XX
PD   31-OCT-2000.
XX
PF   03-JUN-1996;   96US-0657162.
XX
PR   22-SEP-1994;   94US-0311611.
PR   22-SEP-1993;   93US-0125651.
PR   11-JUL-1994;   94US-0273401.
XX
PA   (XOMA ) XOMA CORP.
XX
PI   Little RG,  Lambert LH;
XX
DR   WPI; 2001-014864/02.
XX
PT   Enhancing the effect of antibiotic treatment for treating and
PT   preventing gram-negative bacterial infections, e.g. sepsis, by
PT   co-administering bactericidal/permeability increasing protein product
PT   with a tetracycline -
XX
PS   Example 24; Column 119-120; 133pp; English.
XX
CC   The present sequence is a bactericidal/permeability increasing (BPI)
CC   peptide with gram-negative bactericidal activity. BPI proteins may be
CC   used to enhance the effect of antibiotic treatment of a patient infected
CC   with gram-negative bacteria. The method is useful for the treatment and
CC   prophylaxis of patients at high risk of gram-negative bacterial
CC   infections, e.g. patients who will undergo abdominal or genitourinary
CC   surgery, or trauma victims. Gram-negative bacterial infections which may
CC   be treated with the BPI protein product and the antibiotic includes
```

CC sepsis, endotoxin-related hypotension and shock, and related conditions
CC including fever, metabolic acidosis, disseminated intravascular
CC coagulation and related clotting disorders, anaemia, thrombocytopaenia,
CC leukopaenia, adult respiratory distress syndrome and related pulmonary
CC disorders, renal failure/disorders, hepatobiliary disease, central
CC nervous system disorders, translocation of bacteria from the intestines
CC and concomitant release of endotoxin. Compositions comprising BPI
CC protein product and an antibiotic can be used as a bactericide to
CC decontaminate fluids and surfaces, and to sterilize surgical and other
CC medical equipment and implantable devices including prosthetic joints.
CC Concurrent administration of the BPI protein product and an
CC antibiotic is more effective even when the gram-negative bacteria
CC involved are considered to be resistant to the bactericidal effects of
CC the BPI protein product alone and/or the antibiotic alone.
XX
SQ Sequence 14 AA;

Query Match 100.0%; Score 57; DB 22; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.0023;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 5 KWLIQLFHKK 14

Search completed: October 1, 2003, 09:52:36
Job time : 72 secs

GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: October 1, 2003, 09:42:03 ; Search time 41 Seconds
(without alignments)
10.320 Million cell updates/sec

Title: US-09-881-490-126
Perfect score: 57
Sequence: 1 KWLIQLFHKK 10

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 328717 seqs, 42310858 residues

Total number of hits satisfying chosen parameters: 96

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 100%
Maximum Match 100%
Listing first 1000 summaries

Database : Issued_Patents_AA:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	57	100.0	10	2	US-08-621-803-159	Sequence 159, App
2	57	100.0	10	2	US-08-621-803-215	Sequence 215, App
3	57	100.0	10	2	US-08-621-259A-126	Sequence 126, App
4	57	100.0	10	2	US-08-621-259A-194	Sequence 194, App
5	57	100.0	10	2	US-08-621-259A-195	Sequence 195, App
6	57	100.0	10	2	US-08-621-259A-196	Sequence 196, App
7	57	100.0	10	2	US-08-621-259A-197	Sequence 197, App
8	57	100.0	10	2	US-08-621-259A-204	Sequence 204, App
9	57	100.0	10	2	US-08-621-259A-244	Sequence 244, App
10	57	100.0	10	2	US-08-621-259A-245	Sequence 245, App
11	57	100.0	10	2	US-08-621-259A-246	Sequence 246, App
12	57	100.0	10	2	US-08-621-259A-247	Sequence 247, App
13	57	100.0	10	2	US-08-621-259A-250	Sequence 250, App
14	57	100.0	10	3	US-09-217-352-159	Sequence 159, App
15	57	100.0	10	3	US-09-217-352-215	Sequence 215, App
16	57	100.0	10	4	US-09-344-541A-1	Sequence 1, Appli
17	57	100.0	10	4	US-09-344-541A-2	Sequence 2, Appli
18	57	100.0	10	4	US-09-344-541A-3	Sequence 3, Appli
19	57	100.0	10	4	US-09-344-541A-11	Sequence 11, Appl
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22	57	100.0	10	4	US-09-344-541A-14	Sequence 14, Appl
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65	57	100.0	11	2	US-08-621-259A-183	Sequence 183, App
66	57	100.0	11	3	US-09-217-352-155	Sequence 155, App
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73	57	100.0	12	5	PCT-US95-09262-119	Sequence 119, App
74	57	100.0	13	2	US-08-621-803-150	Sequence 150, App
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77	57	100.0	13	5	PCT-US95-09262-117	Sequence 117, App
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84	57	100.0	14	2	US-08-621-803-96	Sequence 86, Appl
85	57	100.0	14	2	US-08-485-445A-92	Sequence 92, Appl
86	57	100.0	14	2	US-08-621-259A-31	Sequence 31, Appl
87	57	100.0	14	3	US-09-119-263-92	Sequence 92, Appl
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91	57	100.0	14	3	US-09-217-352-86	Sequence 86, Appl
92	57	100.0	14	4	US-09-790-230-92	Sequence 92, Appl
93	57	100.0	14	5	PCT-US94-02465-92	Sequence 92, Appl
94	57	100.0	14	5	PCT-US95-00498-92	Sequence 92, Appl
95	57	100.0	14	5	PCT-US95-00656-92	Sequence 92, Appl
96	57	100.0	14	5	PCT-US95-09262-31	Sequence 31, Appl

ALIGNMENTS

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RESULT 1
US-08-621-803-159
; Sequence 159, Application US/08621803
; Patent No. 5851802
;  GENERAL INFORMATION:
;    APPLICANT:  Better, Marc D.
;    TITLE OF INVENTION:  Methods for Recombinant Microbial Production of
;    TITLE OF INVENTION:  Fusion Proteins and BPI-Derived Peptides
;    NUMBER OF SEQUENCES:  265
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60606-6402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/621,803
;      FILING DATE:  22-MAR-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Borun, Michael F.
;      REGISTRATION NUMBER:  25,447
;      REFERENCE/DOCKET NUMBER:  27129/33199
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  159:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  10 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.293"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
US-08-621-803-159

  Query Match             100.0%;  Score 57;  DB 2;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 2
US-08-621-803-215
; Sequence 215, Application US/08621803
; Patent No. 5851802
;  GENERAL INFORMATION:
;    APPLICANT:  Better, Marc D.
;    TITLE OF INVENTION:  Methods for Recombinant Microbial Production of
;    TITLE OF INVENTION:  Fusion Proteins and BPI-Derived Peptides
;    NUMBER OF SEQUENCES:  265
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60606-6402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/621,803
;      FILING DATE:  22-MAR-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Borun, Michael F.
;      REGISTRATION NUMBER:  25,447
;      REFERENCE/DOCKET NUMBER:  27129/33199
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  215:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  10 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.373"
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;      NAME/KEY:  Modified-site
;      LOCATION:  1
;      OTHER INFORMATION:  /label= Acetylated
;      OTHER INFORMATION:  /note= "Position 1 is acetylated."
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
US-08-621-803-215

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  Best Local Similarity   100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 3
US-08-621-259A-126
; Sequence 126, Application US/08621259A
; Patent No. 5858974
;  GENERAL INFORMATION:
;    APPLICANT:  Little II, Roger G
;    APPLICANT:  Lim, Edward
;    APPLICANT:  Fadem, Mitchell B.
;    TITLE OF INVENTION:  Anti-Fungal Peptides
;    NUMBER OF SEQUENCES:  252
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  McAndrews, Held & Malloy, Ltd.
;      STREET:  500 West Madison Street
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60661
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/621,259A
;      FILING DATE:  21-MAR-1996
;    PRIOR APPLICATION DATA:
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;       APPLICATION NUMBER:  08/504,841
;       FILING DATE:  20-JUL-1995
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  McNicholas, Janet M.
;       REGISTRATION NUMBER:  32,918
;       REFERENCE/DOCKET NUMBER:  11021US02
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  312/707-8889
;       TELEFAX:  312/707-9155
;       TELEX:
;   INFORMATION FOR SEQ ID NO:  126:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  10 amino acids
;       TYPE:  amino acid
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  peptide
;     FEATURE:
;       NAME/KEY:  misc_feature
;       OTHER INFORMATION:  "XMP.293"
;     FEATURE:
;       NAME/KEY:  Modified-site
;       LOCATION:  C-Terminus
;       OTHER INFORMATION:  /label= Amidation
;       OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
US-08-621-259A-126

  Query Match             100.0%;  Score 57;  DB 2;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 4
US-08-621-259A-194
; Sequence 194, Application US/08621259A
; Patent No. 5858974
;  GENERAL INFORMATION:
;    APPLICANT:  Little II, Roger G
;    APPLICANT:  Lim, Edward
;    APPLICANT:  Fadem, Mitchell B.
;    TITLE OF INVENTION:  Anti-Fungal Peptides
;    NUMBER OF SEQUENCES:  252
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  McAndrews, Held & Malloy, Ltd.
;      STREET:  500 West Madison Street
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60661
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/621,259A
;      FILING DATE:  21-MAR-1996
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/504,841
;      FILING DATE:  20-JUL-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  McNicholas, Janet M.
;      REGISTRATION NUMBER:  32,918
;      REFERENCE/DOCKET NUMBER:  11021US02
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/707-8889
;      TELEFAX:  312/707-9155
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  194:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  10 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
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;      OTHER INFORMATION:  "XMP.363"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  1, 9 & 10
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;      OTHER INFORMATION:  /note= "Positions 1, 9 & 10 are D-lysine."
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  2
;      OTHER INFORMATION:  /label= D-Trp
;      OTHER INFORMATION:  /note= "Position 2 is D-tryptophan."
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
US-08-621-259A-194

  Query Match             100.0%;  Score 57;  DB 2;  Length 10;
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  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
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Db          1 KWLIQLFHKK 10


RESULT 5
US-08-621-259A-195
; Sequence 195, Application US/08621259A
; Patent No. 5858974
;  GENERAL INFORMATION:
;    APPLICANT:  Little II, Roger G
;    APPLICANT:  Lim, Edward
;    APPLICANT:  Fadem, Mitchell B.
;    TITLE OF INVENTION:  Anti-Fungal Peptides
;    NUMBER OF SEQUENCES:  252
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  McAndrews, Held & Malloy, Ltd.
;      STREET:  500 West Madison Street
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60661
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/621,259A
;      FILING DATE:  21-MAR-1996
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/504,841
;      FILING DATE:  20-JUL-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  McNicholas, Janet M.
;      REGISTRATION NUMBER:  32,918
;      REFERENCE/DOCKET NUMBER:  11021US02
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/707-8889
;      TELEFAX:  312/707-9155
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  195:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  10 amino acids
;      TYPE:  amino acid
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Appl.

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;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
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;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.364"
;    FEATURE:
;      NAME/KEY:  Modified-site
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;      OTHER INFORMATION:  /note= "Position 1 is acetylated."
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  1, 9 & 10
;      OTHER INFORMATION:  /label= D-Lys
;      OTHER INFORMATION:  /note= "Positions 1, 9 & 10 are D-lysine."
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  2
;      OTHER INFORMATION:  /label= D-Trp
;      OTHER INFORMATION:  /note= "Position 2 is D-tryptophan."
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
US-08-621-259A-195

  Query Match             100.0%;  Score 57;  DB 2;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
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Db          1 KWLIQLFHKK 10


RESULT 6
US-08-621-259A-196
; Sequence 196, Application US/08621259A
; Patent No. 5858974
;  GENERAL INFORMATION:
;    APPLICANT:  Little II, Roger G
;    APPLICANT:  Lim, Edward
;    APPLICANT:  Fadem, Mitchell B.
;    TITLE OF INVENTION:  Anti-Fungal Peptides
;    NUMBER OF SEQUENCES:  252
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  McAndrews, Held & Malloy, Ltd.
;      STREET:  500 West Madison Street
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60661
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/621,259A
;      FILING DATE:  21-MAR-1996
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/504,841
;      FILING DATE:  20-JUL-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  McNicholas, Janet M.
;      REGISTRATION NUMBER:  32,918
;      REFERENCE/DOCKET NUMBER:  11021US02
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/707-8889
;      TELEFAX:  312/707-9155
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  196:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  10 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.365"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  1-10
;      OTHER INFORMATION:  /label= D-Amino Acids
;      OTHER INFORMATION:  /note= "Positions 1-10 are D-amino acids"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
US-08-621-259A-196

  Query Match             100.0%;  Score 57;  DB 2;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 7
US-08-621-259A-197
; Sequence 197, Application US/08621259A
; Patent No. 5858974
;  GENERAL INFORMATION:
;    APPLICANT:  Little II, Roger G
;    APPLICANT:  Lim, Edward
;    APPLICANT:  Fadem, Mitchell B.
;    TITLE OF INVENTION:  Anti-Fungal Peptides
;    NUMBER OF SEQUENCES:  252
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  McAndrews, Held & Malloy, Ltd.
;      STREET:  500 West Madison Street
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60661
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/621,259A
;      FILING DATE:  21-MAR-1996
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/504,841
;      FILING DATE:  20-JUL-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  McNicholas, Janet M.
;      REGISTRATION NUMBER:  32,918
;      REFERENCE/DOCKET NUMBER:  11021US02
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/707-8889
;      TELEFAX:  312/707-9155
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  197:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  10 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
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;      OTHER INFORMATION:  "XMP.366"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  1
;      OTHER INFORMATION:  /label= Acetylated
;      OTHER INFORMATION:  /note= "Position 1 is acetylated."
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  1-10
;      OTHER INFORMATION:  /label= D-Amino Acids
;      OTHER INFORMATION:  /note= "Positions 1-10 are D-amino acids"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
US-08-621-259A-197

  Query Match             100.0%;  Score 57;  DB 2;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 8
US-08-621-259A-204
; Sequence 204, Application US/08621259A
; Patent No. 5858974
;  GENERAL INFORMATION:
;    APPLICANT:  Little II, Roger G
;    APPLICANT:  Lim, Edward
;    APPLICANT:  Fadem, Mitchell B.
;    TITLE OF INVENTION:  Anti-Fungal Peptides
;    NUMBER OF SEQUENCES:  252
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  McAndrews, Held & Malloy, Ltd.
;      STREET:  500 West Madison Street
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60661
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/621,259A
;      FILING DATE:  21-MAR-1996
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/504,841
;      FILING DATE:  20-JUL-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  McNicholas, Janet M.
;      REGISTRATION NUMBER:  32,918
;      REFERENCE/DOCKET NUMBER:  11021US02
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/707-8889
;      TELEFAX:  312/707-9155
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  204:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  10 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.373"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  1
;      OTHER INFORMATION:  /label= Acetylated
;      OTHER INFORMATION:  /note= "Position 1 is acetylated."
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
US-08-621-259A-204

  Query Match             100.0%;  Score 57;  DB 2;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 9
US-08-621-259A-244
; Sequence 244, Application US/08621259A
; Patent No. 5858974
;  GENERAL INFORMATION:
;    APPLICANT:  Little II, Roger G
;    APPLICANT:  Lim, Edward
;    APPLICANT:  Fadem, Mitchell B.
;    TITLE OF INVENTION:  Anti-Fungal Peptides
;    NUMBER OF SEQUENCES:  252
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  McAndrews, Held & Malloy, Ltd.
;      STREET:  500 West Madison Street
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60661
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/621,259A
;      FILING DATE:  21-MAR-1996
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/504,841
;      FILING DATE:  20-JUL-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  McNicholas, Janet M.
;      REGISTRATION NUMBER:  32,918
;      REFERENCE/DOCKET NUMBER:  11021US02
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/707-8889
;      TELEFAX:  312/707-9155
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  244:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  10 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.414"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  1-10
;      OTHER INFORMATION:  /label= D-Amino Acids
;      OTHER INFORMATION:  /note= "Positions 1-10 are D-amino acids"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
```

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;       OTHER INFORMATION:  /label= Amidation
;       OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
;     FEATURE:
;       NAME/KEY:  Modified-site
;       LOCATION:  N-Terminus
;       OTHER INFORMATION:  /label= caprylyl group
;       OTHER INFORMATION:  /note= "CH3-(CH2)6-CO at N-Terminus."
US-08-621-259A-244

  Query Match             100.0%;  Score 57;  DB 2;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 10
US-08-621-259A-245
; Sequence 245, Application US/08621259A
; Patent No. 5858974
;  GENERAL INFORMATION:
;    APPLICANT:  Little II, Roger G
;    APPLICANT:  Lim, Edward
;    APPLICANT:  Fadem, Mitchell B.
;    TITLE OF INVENTION:  Anti-Fungal Peptides
;    NUMBER OF SEQUENCES:  252
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  McAndrews, Held & Malloy, Ltd.
;      STREET:  500 West Madison Street
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60661
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/621,259A
;      FILING DATE:  21-MAR-1996
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/504,841
;      FILING DATE:  20-JUL-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  McNicholas, Janet M.
;      REGISTRATION NUMBER:  32,918
;      REFERENCE/DOCKET NUMBER:  11021US02
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/707-8889
;      TELEFAX:  312/707-9155
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  245:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  10 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.415"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  1-10
;      OTHER INFORMATION:  /label= D-Amino Acids
;      OTHER INFORMATION:  /note= "Positions 1-10 are D-amino acids"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  N-Terminus
;      OTHER INFORMATION:  /label= lauryl group
;      OTHER INFORMATION:  /note= "CH3-(CH2)10-CO at N-Terminus."
US-08-621-259A-245

  Query Match             100.0%;  Score 57;  DB 2;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 11
US-08-621-259A-246
; Sequence 246, Application US/08621259A
; Patent No. 5858974
;  GENERAL INFORMATION:
;    APPLICANT:  Little II, Roger G
;    APPLICANT:  Lim, Edward
;    APPLICANT:  Fadem, Mitchell B.
;    TITLE OF INVENTION:  Anti-Fungal Peptides
;    NUMBER OF SEQUENCES:  252
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  McAndrews, Held & Malloy, Ltd.
;      STREET:  500 West Madison Street
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60661
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/621,259A
;      FILING DATE:  21-MAR-1996
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/504,841
;      FILING DATE:  20-JUL-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  McNicholas, Janet M.
;      REGISTRATION NUMBER:  32,918
;      REFERENCE/DOCKET NUMBER:  11021US02
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/707-8889
;      TELEFAX:  312/707-9155
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  246:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  10 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.416"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  1-10
;      OTHER INFORMATION:  /label= D-Amino Acids
;      OTHER INFORMATION:  /note= "Positions 1-10 are D-amino acids"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
;    FEATURE:
;      NAME/KEY:  Modified-site
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;       LOCATION:  N-Terminus
;       OTHER INFORMATION:  /label= 8-amino-octanyl group
;       OTHER INFORMATION:  /note= "NH2-(CH2)7-CO at N-Terminus."
US-08-621-259A-246

  Query Match             100.0%;  Score 57;  DB 2;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 12
US-08-621-259A-247
; Sequence 247, Application US/08621259A
; Patent No. 5858974
;  GENERAL INFORMATION:
;    APPLICANT:  Little II, Roger G
;    APPLICANT:  Lim, Edward
;    APPLICANT:  Fadem, Mitchell B.
;    TITLE OF INVENTION:  Anti-Fungal Peptides
;    NUMBER OF SEQUENCES:  252
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  McAndrews, Held & Malloy, Ltd.
;      STREET:  500 West Madison Street
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60661
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/621,259A
;      FILING DATE:  21-MAR-1996
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/504,841
;      FILING DATE:  20-JUL-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  McNicholas, Janet M.
;      REGISTRATION NUMBER:  32,918
;      REFERENCE/DOCKET NUMBER:  11021US02
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/707-8889
;      TELEFAX:  312/707-9155
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  247:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  10 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.417"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  1-10
;      OTHER INFORMATION:  /label= D-Amino Acids
;      OTHER INFORMATION:  /note= "Positions 1-10 are D-amino acids"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  N-Terminus
;      OTHER INFORMATION:  /label= 12-amino-dodecanyl group
;       OTHER INFORMATION:  /note= "NH2-(CH2)11-CO at N-Terminus."
US-08-621-259A-247

  Query Match             100.0%;  Score 57;  DB 2;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 13
US-08-621-259A-250
; Sequence 250, Application US/08621259A
; Patent No. 5858974
;  GENERAL INFORMATION:
;    APPLICANT:  Little II, Roger G
;    APPLICANT:  Lim, Edward
;    APPLICANT:  Fadem, Mitchell B.
;    TITLE OF INVENTION:  Anti-Fungal Peptides
;    NUMBER OF SEQUENCES:  252
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  McAndrews, Held & Malloy, Ltd.
;      STREET:  500 West Madison Street
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60661
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/621,259A
;      FILING DATE:  21-MAR-1996
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/504,841
;      FILING DATE:  20-JUL-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  McNicholas, Janet M.
;      REGISTRATION NUMBER:  32,918
;      REFERENCE/DOCKET NUMBER:  11021US02
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/707-8889
;      TELEFAX:  312/707-9155
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  250:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  10 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.420"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  N-Terminus
;      OTHER INFORMATION:  /label=
;      OTHER INFORMATION:  /note= "The N-Terminus is protected by
;      OTHER INFORMATION:  1-Fluorenylmethyl-
;      OTHER INFORMATION:  oxycarbonyl (Fmoc)"
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.365"
;    FEATURE:
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;       NAME/KEY:  Modified-site
;       LOCATION:  1-10
;       OTHER INFORMATION:  /label= D-Amino Acids
;       OTHER INFORMATION:  /note= "Positions 1-10 are D-amino acids"
US-08-621-259A-250

  Query Match             100.0%;  Score 57;  DB 2;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 14
US-09-217-352-159
; Sequence 159, Application US/09217352
; Patent No. 6274344
;  GENERAL INFORMATION:
;    APPLICANT:  Better, Marc D.
;    TITLE OF INVENTION:  Methods for Recombinant Microbial Production of
;    TITLE OF INVENTION:  Fusion Proteins and BPI-Derived Peptides
;    NUMBER OF SEQUENCES:  265
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60606-6402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/217,352
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/621,803
;      FILING DATE:  22-MAR-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Borun, Michael F.
;      REGISTRATION NUMBER:  25,447
;      REFERENCE/DOCKET NUMBER:  27129/33199
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  159:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  10 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.293"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
US-09-217-352-159

  Query Match             100.0%;  Score 57;  DB 3;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 15
US-09-217-352-215
; Sequence 215, Application US/09217352
; Patent No. 6274344
;  GENERAL INFORMATION:
;    APPLICANT:  Better, Marc D.
;    TITLE OF INVENTION:  Methods for Recombinant Microbial Production of
;    TITLE OF INVENTION:  Fusion Proteins and BPI-Derived Peptides
;    NUMBER OF SEQUENCES:  265
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60606-6402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/217,352
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/621,803
;      FILING DATE:  22-MAR-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Borun, Michael F.
;      REGISTRATION NUMBER:  25,447
;      REFERENCE/DOCKET NUMBER:  27129/33199
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  215:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  10 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.373"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  1
;      OTHER INFORMATION:  /label= Acetylated
;      OTHER INFORMATION:  /note= "Position 1 is acetylated."
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
US-09-217-352-215

  Query Match             100.0%;  Score 57;  DB 3;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 16
US-09-344-541A-1
; Sequence 1, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
;  APPLICANT:  Little, II, Roger G.
```

```
;  APPLICANT:  Lin, Jong J.
;  APPLICANT:  Gikonyo, J. G. Kinyua
;  TITLE OF INVENTION:  Derivative Compounds
;  FILE REFERENCE:  11045US01
;  CURRENT APPLICATION NUMBER: US/09/344,541A
;  CURRENT FILING DATE:  1999-06-25
;  NUMBER OF SEQ ID NOS:  61
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 1
;   LENGTH: 10
;   TYPE: PRT
;   ORGANISM: derived from human
;   FEATURE:
;   OTHER INFORMATION: XMP.365
;   NAME/KEY: SITE
;   LOCATION: (1)..(10)
;   OTHER INFORMATION: Positions 1-10 are D-Amino Acids
;   NAME/KEY: SITE
;   LOCATION: (10)
;   OTHER INFORMATION: AMIDATION=The C-terminus is Amidated
US-09-344-541A-1

  Query Match           100.0%;  Score 57;  DB 4;  Length 10;
  Best Local Similarity  100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 17
US-09-344-541A-2
; Sequence 2, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
;  APPLICANT:  Little, II, Roger G.
;  APPLICANT:  Lin, Jong J.
;  APPLICANT:  Gikonyo, J. G. Kinyua
;  TITLE OF INVENTION:  Derivative Compounds
;  FILE REFERENCE:  11045US01
;  CURRENT APPLICATION NUMBER: US/09/344,541A
;  CURRENT FILING DATE:  1999-06-25
;  NUMBER OF SEQ ID NOS:  61
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 2
;   LENGTH: 10
;   TYPE: PRT
;   ORGANISM: derived from human
;   FEATURE:
;   OTHER INFORMATION: XMP.366
;   NAME/KEY: SITE
;   LOCATION: (1)
;   OTHER INFORMATION: Position 1 is derivatized at the  alpha-amino
;   OTHER INFORMATION: with:  acetyl
;   NAME/KEY: SITE
;   LOCATION: (1)..(10)
;   OTHER INFORMATION: Positions 1-10 are D-Amino Acids
;   NAME/KEY: SITE
;   LOCATION: (10)
;   OTHER INFORMATION: AMIDATION=The C-terminus is Amidated
US-09-344-541A-2

  Query Match           100.0%;  Score 57;  DB 4;  Length 10;
  Best Local Similarity  100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 18
```

bad date

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US-09-344-541A-3
; Sequence 3, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
;  APPLICANT:  Little, II, Roger G.
;  APPLICANT:  Lin, Jong J.
;  APPLICANT:  Gikonyo, J. G. Kinyua
;  TITLE OF INVENTION:  Derivative Compounds
;  FILE REFERENCE:  11045US01
;  CURRENT APPLICATION NUMBER: US/09/344,541A
;  CURRENT FILING DATE:  1999-06-25
;  NUMBER OF SEQ ID NOS:  61
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 3
;   LENGTH: 10
;   TYPE: PRT
;   ORGANISM: derived from human
;   FEATURE:
;   OTHER INFORMATION: XMP.416
;   NAME/KEY: SITE
;   LOCATION: (1)
;   OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
;   OTHER INFORMATION: 7- amino-heptylcarbonyl
;   NAME/KEY: SITE
;   LOCATION: (1)..(10)
;   OTHER INFORMATION: Positions 1-10 are D-Amino Acids
;   NAME/KEY: SITE
;   LOCATION: (10)
;   OTHER INFORMATION: AMIDATION=The C-terminus is Amidated
US-09-344-541A-3

  Query Match           100.0%;  Score 57;  DB 4;  Length 10;
  Best Local Similarity  100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 19
US-09-344-541A-11
; Sequence 11, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
;  APPLICANT:  Little, II, Roger G.
;  APPLICANT:  Lin, Jong J.
;  APPLICANT:  Gikonyo, J. G. Kinyua
;  TITLE OF INVENTION:  Derivative Compounds
;  FILE REFERENCE:  11045US01
;  CURRENT APPLICATION NUMBER: US/09/344,541A
;  CURRENT FILING DATE:  1999-06-25
;  NUMBER OF SEQ ID NOS:  61
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 11
;   LENGTH: 10
;   TYPE: PRT
;   ORGANISM: derived from human
;   FEATURE:
;   OTHER INFORMATION: XMP.488
;   NAME/KEY: SITE
;   LOCATION: (1)
;   OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
;   OTHER INFORMATION: fluorescein
;   NAME/KEY: SITE
;   LOCATION: (1)..(10)
;   OTHER INFORMATION: Positions 1-10 are D-Amino Acids
;   NAME/KEY: SITE
;   LOCATION: (10)
;   OTHER INFORMATION: AMIDATION=The C-terminus is Amidated
US-09-344-541A-11

  Query Match           100.0%;  Score 57;  DB 4;  Length 10;
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Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10
```

RESULT 20
US-09-344-541A-12
; Sequence 12, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; APPLICANT: Lin, Jong J.
; APPLICANT: Gikonyo, J. G. Kinyua
; TITLE OF INVENTION: Derivative Compounds
; FILE REFERENCE: 11045US01
; CURRENT APPLICATION NUMBER: US/09/344,541A
; CURRENT FILING DATE: 1999-06-25
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 12
; LENGTH: 10
; TYPE: PRT
; ORGANISM: derived from human
; FEATURE:
; OTHER INFORMATION: XMP.489
; NAME/KEY: SITE
; LOCATION: (1)
; OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
; OTHER INFORMATION: acetyl
; NAME/KEY: SITE
; LOCATION: (10)
; OTHER INFORMATION: Position 10 is derivatized at the carboxy terminus
; OTHER INFORMATION: with: 2-(N-fluoroscein)diaminopropylamide
; NAME/KEY: SITE
; LOCATION: (1)..(10)
; OTHER INFORMATION: Positions 1-10 are D-Amino Acids
US-09-344-541A-12

Query Match 100.0%; Score 57; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10
```

RESULT 21
US-09-344-541A-13
; Sequence 13, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; APPLICANT: Lin, Jong J.
; APPLICANT: Gikonyo, J. G. Kinyua
; TITLE OF INVENTION: Derivative Compounds
; FILE REFERENCE: 11045US01
; CURRENT APPLICATION NUMBER: US/09/344,541A
; CURRENT FILING DATE: 1999-06-25
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 13
; LENGTH: 10
; TYPE: PRT
; ORGANISM: derived from human
; FEATURE:
; OTHER INFORMATION: XMP.492
; NAME/KEY: SITE
; LOCATION: ()..(10)
; OTHER INFORMATION: Positions 1-10 are D-amino acids
; NAME/KEY: SITE
; LOCATION: ()
; OTHER INFORMATION: Position 1 is derivatized with: 2-aminoethyl
; OTHER INFORMATION: carbonyl
; NAME/KEY: SITE
; LOCATION: (10)
; OTHER INFORMATION: AMIDATION-The C-terminus is Amidated
US-09-344-541A-13

Query Match 100.0%; Score 57; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10
```

RESULT 22
US-09-344-541A-14
; Sequence 14, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; APPLICANT: Lin, Jong J.
; APPLICANT: Gikonyo, J. G. Kinyua
; TITLE OF INVENTION: Derivative Compounds
; FILE REFERENCE: 11045US01
; CURRENT APPLICATION NUMBER: US/09/344,541A
; CURRENT FILING DATE: 1999-06-25
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 14
; LENGTH: 10
; TYPE: PRT
; ORGANISM: derived from human
; FEATURE:
; OTHER INFORMATION: XMP.493
; NAME/KEY: SITE
; LOCATION: (1)..(10)
; OTHER INFORMATION: Positions 1-10 are D-amino acids
; NAME/KEY: SITE
; LOCATION: (1)
; OTHER INFORMATION: Position 1 is derivatized with: 3-aminopropyl
; OTHER INFORMATION: carbonyl
; NAME/KEY: SITE
; LOCATION: (10)
; OTHER INFORMATION: AMIDATION-The C-terminus is Amidated
US-09-344-541A-14

Query Match 100.0%; Score 57; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10
```

RESULT 23
US-09-344-541A-15
; Sequence 15, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; APPLICANT: Lin, Jong J.
; APPLICANT: Gikonyo, J. G. Kinyua
; TITLE OF INVENTION: Derivative Compounds
; FILE REFERENCE: 11045US01
; CURRENT APPLICATION NUMBER: US/09/344,541A
; CURRENT FILING DATE: 1999-06-25
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn Ver. 2.1

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; SEQ ID NO 15
;   LENGTH: 10
;   TYPE: PRT
;   ORGANISM: derived from human
;   FEATURE:
;   OTHER INFORMATION: XMP.496
;   NAME/KEY: SITE
;   LOCATION: (1)
;   OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
;   OTHER INFORMATION: 10- amino-decylcarbonyl
;   NAME/KEY: SITE
;   LOCATION: (1)..(10)
;   OTHER INFORMATION: Positions 1-10 are D-Amino Acids
;   NAME/KEY: SITE
;   LOCATION: (10)
;   OTHER INFORMATION: AMIDATION=The C-terminus is Amidated
US-09-344-541A-15

  Query Match             100.0%;  Score 57;  DB 4;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 24
US-09-344-541A-16
; Sequence 16, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
;  APPLICANT:  Little, II, Roger G.
;  APPLICANT:  Lin, Jong J.
;  APPLICANT:  Gikonyo, J. G. Kinyua
;  TITLE OF INVENTION:  Derivative Compounds
;  FILE REFERENCE:  11045US01
;  CURRENT APPLICATION NUMBER: US/09/344,541A
;  CURRENT FILING DATE:  1999-06-25
;  NUMBER OF SEQ ID NOS:  61
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 16
;   LENGTH: 10
;   TYPE: PRT
;   ORGANISM: derived from human
;   FEATURE:
;   OTHER INFORMATION: XMP.499
;   NAME/KEY: SITE
;   LOCATION: (1)
;   OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
;   OTHER INFORMATION: 2-pyrazine carbonyl
;   NAME/KEY: SITE
;   LOCATION: (1)..(10)
;   OTHER INFORMATION: Positions 1-10 are D-Amino Acids
;   NAME/KEY: SITE
;   LOCATION: (10)
;   OTHER INFORMATION: AMIDATION=The C-terminus is Amidated
US-09-344-541A-16

  Query Match             100.0%;  Score 57;  DB 4;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 25
US-09-344-541A-17
; Sequence 17, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
;  APPLICANT:  Little, II, Roger G.
;  APPLICANT:  Lin, Jong J.
;  APPLICANT:  Gikonyo, J. G. Kinyua
;  TITLE OF INVENTION:  Derivative Compounds
;  FILE REFERENCE:  11045US01
;  CURRENT APPLICATION NUMBER: US/09/344,541A
;  CURRENT FILING DATE:  1999-06-25
;  NUMBER OF SEQ ID NOS:  61
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 17
;   LENGTH: 10
;   TYPE: PRT
;   ORGANISM: derived from human
;   FEATURE:
;   OTHER INFORMATION: XMP.500
;   NAME/KEY: SITE
;   LOCATION: (1)
;   OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
;   OTHER INFORMATION: 4-imidazole carbonyl
;   NAME/KEY: SITE
;   LOCATION: (1)..(10)
;   OTHER INFORMATION: Positions 1-10 are D-Amino Acids
;   NAME/KEY: SITE
;   LOCATION: (10)
;   OTHER INFORMATION: AMIDATION=The C-terminus is Amidated
US-09-344-541A-17

  Query Match             100.0%;  Score 57;  DB 4;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 26
US-09-344-541A-18
; Sequence 18, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
;  APPLICANT:  Little, II, Roger G.
;  APPLICANT:  Lin, Jong J.
;  APPLICANT:  Gikonyo, J. G. Kinyua
;  TITLE OF INVENTION:  Derivative Compounds
;  FILE REFERENCE:  11045US01
;  CURRENT APPLICATION NUMBER: US/09/344,541A
;  CURRENT FILING DATE:  1999-06-25
;  NUMBER OF SEQ ID NOS:  61
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 18
;   LENGTH: 10
;   TYPE: PRT
;   ORGANISM: derived from human
;   FEATURE:
;   OTHER INFORMATION: XMP.501
;   NAME/KEY: SITE
;   LOCATION: (1)
;   OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
;   OTHER INFORMATION: 1-(4-imidazole) methylene carbonyl
;   NAME/KEY: SITE
;   LOCATION: (1)..(10)
;   OTHER INFORMATION: Positions 1-10 are D-Amino Acids
;   NAME/KEY: SITE
;   LOCATION: (10)
;   OTHER INFORMATION: AMIDATION=The C-terminus is Amidated
US-09-344-541A-18

  Query Match             100.0%;  Score 57;  DB 4;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
```

```
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 27
US-09-344-541A-19
; Sequence 19, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
;  APPLICANT:  Little, II, Roger G.
;  APPLICANT:  Lin, Jong J.
;  APPLICANT:  Gikonyo, J. G. Kinyua
;  TITLE OF INVENTION:  Derivative Compounds
;  FILE REFERENCE:  11045US01
;  CURRENT APPLICATION NUMBER: US/09/344,541A
;  CURRENT FILING DATE:  1999-06-25
;  NUMBER OF SEQ ID NOS:  61
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 19
;   LENGTH: 10
;   TYPE: PRT
;   ORGANISM: derived from human
;   FEATURE:
;   OTHER INFORMATION: XMP.502
;   NAME/KEY: SITE
;   LOCATION: (1)
;   OTHER INFORMATION: Position 1 is derivatized at the  alpha-amino
;   OTHER INFORMATION: with:  2-imino-1- imidazolidine methylene carbonyl
;   NAME/KEY: SITE
;   LOCATION: (1)..(10)
;   OTHER INFORMATION: Positions 1-10 are D-Amino Acids
;   NAME/KEY: SITE
;   LOCATION: (10)
;   OTHER INFORMATION: AMIDATION=The C-terminus is Amidated
US-09-344-541A-19

  Query Match             100.0%;  Score 57;  DB 4;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 28
US-09-344-541A-20
; Sequence 20, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
;  APPLICANT:  Little, II, Roger G.
;  APPLICANT:  Lin, Jong J.
;  APPLICANT:  Gikonyo, J. G. Kinyua
;  TITLE OF INVENTION:  Derivative Compounds
;  FILE REFERENCE:  11045US01
;  CURRENT APPLICATION NUMBER: US/09/344,541A
;  CURRENT FILING DATE:  1999-06-25
;  NUMBER OF SEQ ID NOS:  61
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 20
;   LENGTH: 10
;   TYPE: PRT
;   ORGANISM: derived from human
;   FEATURE:
;   OTHER INFORMATION: XMP.503
;   NAME/KEY: SITE
;   LOCATION: (1)
;   OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
;   OTHER INFORMATION: pyridine carbonyl
;   NAME/KEY: SITE
;   LOCATION: (1)..(10)
;   OTHER INFORMATION: Positions 1-10 are D-Amino Acids
;   NAME/KEY: SITE
;   LOCATION: (10)
;   OTHER INFORMATION: AMIDATION=The C-terminus is Amidated
US-09-344-541A-20

  Query Match             100.0%;  Score 57;  DB 4;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 29
US-09-344-541A-21
; Sequence 21, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
;  APPLICANT:  Little, II, Roger G.
;  APPLICANT:  Lin, Jong J.
;  APPLICANT:  Gikonyo, J. G. Kinyua
;  TITLE OF INVENTION:  Derivative Compounds
;  FILE REFERENCE:  11045US01
;  CURRENT APPLICATION NUMBER: US/09/344,541A
;  CURRENT FILING DATE:  1999-06-25
;  NUMBER OF SEQ ID NOS:  61
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 21
;   LENGTH: 10
;   TYPE: PRT
;   ORGANISM: derived from human
;   FEATURE:
;   OTHER INFORMATION: XMP.504
;   NAME/KEY: SITE
;   LOCATION: (1)
;   OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
;   OTHER INFORMATION: 3-piperidine carbonyl
;   NAME/KEY: SITE
;   LOCATION: (1)..(10)
;   OTHER INFORMATION: Positions 1-10 are D-Amino Acids
;   NAME/KEY: SITE
;   LOCATION: (10)
;   OTHER INFORMATION: AMIDATION=The C-terminus is Amidated
US-09-344-541A-21

  Query Match             100.0%;  Score 57;  DB 4;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 30
US-09-344-541A-22
; Sequence 22, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
;  APPLICANT:  Little, II, Roger G.
;  APPLICANT:  Lin, Jong J.
;  APPLICANT:  Gikonyo, J. G. Kinyua
;  TITLE OF INVENTION:  Derivative Compounds
;  FILE REFERENCE:  11045US01
;  CURRENT APPLICATION NUMBER: US/09/344,541A
;  CURRENT FILING DATE:  1999-06-25
;  NUMBER OF SEQ ID NOS:  61
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 22
;   LENGTH: 10
;   TYPE: PRT
;   ORGANISM: derived from human
;   FEATURE:
```

; OTHER INFORMATION: XMP.516
; NAME/KEY: SITE
; LOCATION: (1)
; OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
; OTHER INFORMATION: acetyl
; NAME/KEY: SITE
; LOCATION: (9)
; OTHER INFORMATION: Position 9 is derivatized at the epsilon-amino
; OTHER INFORMATION: with: fluorescein
; NAME/KEY: SITE
; LOCATION: (1)..(10)
; OTHER INFORMATION: Positions 1-10 are D-Amino Acids
; NAME/KEY: SITE
; LOCATION: (10)
; OTHER INFORMATION: AMIDATION=The C-terminus is Amidated
US-09-344-541A-22

Query Match 100.0%; Score 57; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 31
US-09-344-541A-23
; Sequence 23, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; APPLICANT: Lin, Jong J.
; APPLICANT: Gikonyo, J. G. Kinyua
; TITLE OF INVENTION: Derivative Compounds
; FILE REFERENCE: 11045US01
; CURRENT APPLICATION NUMBER: US/09/344,541A
; CURRENT FILING DATE: 1999-06-25
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 23
; LENGTH: 10
; TYPE: PRT
; ORGANISM: derived from human
; FEATURE:
; OTHER INFORMATION: XMP.517
; NAME/KEY: SITE
; LOCATION: (1)
; OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
; OTHER INFORMATION: acetyl
; NAME/KEY: SITE
; LOCATION: (10)
; OTHER INFORMATION: Position 10 is derivatized at the epsilon-amino
; OTHER INFORMATION: with: fluorescein
; NAME/KEY: SITE
; LOCATION: (1)..(10)
; OTHER INFORMATION: Positions 1-10 are D-Amino Acid
; NAME/KEY: SITE
; LOCATION: (10)
; OTHER INFORMATION: AMIDATION=The C-terminus is Amidated
US-09-344-541A-23

Query Match 100.0%; Score 57; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 32
US-09-344-541A-24
; Sequence 24, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; APPLICANT: Lin, Jong J.
; APPLICANT: Gikonyo, J. G. Kinyua
; TITLE OF INVENTION: Derivative Compounds
; FILE REFERENCE: 11045US01
; CURRENT APPLICATION NUMBER: US/09/344,541A
; CURRENT FILING DATE: 1999-06-25
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 24
; LENGTH: 10
; TYPE: PRT
; ORGANISM: derived from human
; FEATURE:
; OTHER INFORMATION: XMP.518
; NAME/KEY: SITE
; LOCATION: (1)
; OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
; OTHER INFORMATION: acetyl
; NAME/KEY: SITE
; LOCATION: (10)
; OTHER INFORMATION: Position 10 is derivatized at the epsilon-amino
; OTHER INFORMATION: with: biotin-carbonyl
; NAME/KEY: SITE
; LOCATION: (1)..(10)
; OTHER INFORMATION: Positions 1-10 are D-Amino Acids
; NAME/KEY: SITE
; LOCATION: (10)
; OTHER INFORMATION: AMIDATION=The C-terminus is Amidated
US-09-344-541A-24

Query Match 100.0%; Score 57; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 33
US-09-344-541A-25
; Sequence 25, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; APPLICANT: Lin, Jong J.
; APPLICANT: Gikonyo, J. G. Kinyua
; TITLE OF INVENTION: Derivative Compounds
; FILE REFERENCE: 11045US01
; CURRENT APPLICATION NUMBER: US/09/344,541A
; CURRENT FILING DATE: 1999-06-25
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 25
; LENGTH: 10
; TYPE: PRT
; ORGANISM: derived from human
; FEATURE:
; OTHER INFORMATION: XMP.519
; NAME/KEY: SITE
; LOCATION: (1)
; OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
; OTHER INFORMATION: biotin-carbonyl
; NAME/KEY: SITE
; LOCATION: (1)..(10)
; OTHER INFORMATION: Positions 1-10 are D-Amino Acids
; NAME/KEY: SITE
; LOCATION: (10)
; OTHER INFORMATION: AMIDATION=The C-terminus is Amidated

US-09-344-541A-25

Query Match 100.0%; Score 57; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 34
US-09-344-541A-26
; Sequence 26, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; APPLICANT: Lin, Jong J.
; APPLICANT: Gikonyo, J. G. Kinyua
; TITLE OF INVENTION: Derivative Compounds
; FILE REFERENCE: 11045US01
; CURRENT APPLICATION NUMBER: US/09/344,541A
; CURRENT FILING DATE: 1999-06-25
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 26
; LENGTH: 10
; TYPE: PRT
; ORGANISM: derived from human
; FEATURE:
; OTHER INFORMATION: XMP.520
; NAME/KEY: SITE
; LOCATION: (1)
; OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
; OTHER INFORMATION: acetyl
; NAME/KEY: SITE
; LOCATION: (10)
; OTHER INFORMATION: Position 10 is derivatized at the carboxy terminus
; OTHER INFORMATION: with: 2-(N-fluoroscein)diaminopropylamide
; NAME/KEY: SITE
; LOCATION: (1)..(10)
; OTHER INFORMATION: Position 1-10 are D-Amino Acids
US-09-344-541A-26

Query Match 100.0%; Score 57; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 35
US-09-344-541A-27
; Sequence 27, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; APPLICANT: Lin, Jong J.
; APPLICANT: Gikonyo, J. G. Kinyua
; TITLE OF INVENTION: Derivative Compounds
; FILE REFERENCE: 11045US01
; CURRENT APPLICATION NUMBER: US/09/344,541A
; CURRENT FILING DATE: 1999-06-25
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 27
; LENGTH: 10
; TYPE: PRT
; ORGANISM: derived from human
; FEATURE:
; OTHER INFORMATION: XMP.521
; NAME/KEY: SITE
; LOCATION: (1)
; OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
; OTHER INFORMATION: acetyl
; NAME/KEY: SITE
; LOCATION: (9)
; OTHER INFORMATION: Position 9 is derivatized at the epsilon-amino
; OTHER INFORMATION: with: biotin-carbonyl
; NAME/KEY: SITE
; LOCATION: (1)..(10)
; OTHER INFORMATION: Positions 1-10 are D-Amino Acids
; NAME/KEY: SITE
; LOCATION: (10)
; OTHER INFORMATION: AMIDATION-The C-terminus is Amidated
US-09-344-541A-27

Query Match 100.0%; Score 57; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 36
US-09-344-541A-28
; Sequence 28, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; APPLICANT: Lin, Jong J.
; APPLICANT: Gikonyo, J. G. Kinyua
; TITLE OF INVENTION: Derivative Compounds
; FILE REFERENCE: 11045US01
; CURRENT APPLICATION NUMBER: US/09/344,541A
; CURRENT FILING DATE: 1999-06-25
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 28
; LENGTH: 10
; TYPE: PRT
; ORGANISM: derived from human
; FEATURE:
; OTHER INFORMATION: XMP.522
; NAME/KEY: SITE
; LOCATION: (1)
; OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
; OTHER INFORMATION: acetyl
; NAME/KEY: SITE
; LOCATION: (9)
; OTHER INFORMATION: Position 9 is derivatized at the epsilon-amino
; OTHER INFORMATION: with: 5-azido-2-nitrobenzoyl
; NAME/KEY: SITE
; LOCATION: (1)..(10)
; OTHER INFORMATION: Positions 1-10 are D-Amino Acids
; NAME/KEY: SITE
; LOCATION: (10)
; OTHER INFORMATION: AMIDATION-The C-terminus is Amidated
US-09-344-541A-28

Query Match 100.0%; Score 57; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 37
US-09-344-541A-29
; Sequence 29, Application US/09344541A

; Patent No. 6355616
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; APPLICANT: Lin, Jong J.
; APPLICANT: Gikonyo, J. G. Kinyua
; TITLE OF INVENTION: Derivative Compounds
; FILE REFERENCE: 11045US01
; CURRENT APPLICATION NUMBER: US/09/344,541A
; CURRENT FILING DATE: 1999-06-25
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 29
; LENGTH: 10
; TYPE: PRT
; ORGANISM: derived from human
; FEATURE:
; OTHER INFORMATION: XMP.523
; NAME/KEY: SITE
; LOCATION: (1)
; OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
; OTHER INFORMATION: 2-(4-imidazole) acetyl
; NAME/KEY: SITE
; LOCATION: (9)
; OTHER INFORMATION: Position 9 is derivatized at the epsilon-amino
; OTHER INFORMATION: with: 5-azido-2-nitrobenzoyl
; NAME/KEY: SITE
; LOCATION: (1)..(10)
; OTHER INFORMATION: Positions 1-10 are D-Amino Acids
; NAME/KEY: SITE
; LOCATION: (10)
; OTHER INFORMATION: AMIDATION-The C-terminus is Amidated
US-09-344-541A-29

Query Match 100.0%; Score 57; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 38
US-09-344-541A-30
; Sequence 30, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; APPLICANT: Lin, Jong J.
; APPLICANT: Gikonyo, J. G. Kinyua
; TITLE OF INVENTION: Derivative Compounds
; FILE REFERENCE: 11045US01
; CURRENT APPLICATION NUMBER: US/09/344,541A
; CURRENT FILING DATE: 1999-06-25
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 30
; LENGTH: 10
; TYPE: PRT
; ORGANISM: derived from human
; FEATURE:
; OTHER INFORMATION: XMP.524
; NAME/KEY: SITE
; LOCATION: (1)
; OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
; OTHER INFORMATION: 4-piperidine carbonyl
; NAME/KEY: SITE
; LOCATION: (9)
; OTHER INFORMATION: Position 9 is derivatized at the epsilon-amino
; OTHER INFORMATION: with: 5-azido-2-nitrobenzoyl
; NAME/KEY: SITE
; LOCATION: (1)..(10)
; OTHER INFORMATION: Positions 1-10 are D-Amino Acids
; NAME/KEY: SITE
; LOCATION: (10)
; OTHER INFORMATION: AMIDATION-The C-terminus is Amidated
US-09-344-541A-30

Query Match 100.0%; Score 57; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 39
US-09-344-541A-31
; Sequence 31, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; APPLICANT: Lin, Jong J.
; APPLICANT: Gikonyo, J. G. Kinyua
; TITLE OF INVENTION: Derivative Compounds
; FILE REFERENCE: 11045US01
; CURRENT APPLICATION NUMBER: US/09/344,541A
; CURRENT FILING DATE: 1999-06-25
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 31
; LENGTH: 10
; TYPE: PRT
; ORGANISM: derived from human
; FEATURE:
; OTHER INFORMATION: XMP.525
; NAME/KEY: SITE
; LOCATION: (1)
; OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
; OTHER INFORMATION: 2-(2-imino-1-imidazolidine) acetyl
; NAME/KEY: SITE
; LOCATION: (9)
; OTHER INFORMATION: Position 9 is derivatized at the epsilon-amino
; OTHER INFORMATION: with: 5-azido-2-nitrobenzoyl
; NAME/KEY: SITE
; LOCATION: (1)..(10)
; OTHER INFORMATION: Positions 1-10 are D-Amino Acids
; NAME/KEY: SITE
; LOCATION: (10)
; OTHER INFORMATION: AMIDATION-The C-terminus is Amidated
US-09-344-541A-31

Query Match 100.0%; Score 57; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 40
US-09-344-541A-32
; Sequence 32, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; APPLICANT: Lin, Jong J.
; APPLICANT: Gikonyo, J. G. Kinyua
; TITLE OF INVENTION: Derivative Compounds
; FILE REFERENCE: 11045US01
; CURRENT APPLICATION NUMBER: US/09/344,541A
; CURRENT FILING DATE: 1999-06-25
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 32
; LENGTH: 10
; TYPE: PRT
; ORGANISM: derived from human
; FEATURE:
; OTHER INFORMATION: XMP.526
; NAME/KEY: SITE
; LOCATION: (1)
; OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
; OTHER INFORMATION: acetyl
; NAME/KEY: SITE
; LOCATION: (9)
; OTHER INFORMATION: Position 9 is derivatized at the epsilon-amino
; OTHER INFORMATION: with: N-hydroxysuccinimidyl-4-azidosalicylyl
; NAME/KEY: SITE
; LOCATION: (1)..(10)
; OTHER INFORMATION: Positions 1-10 are D-Amino Acids
; NAME/KEY: SITE
; LOCATION: (10)
; OTHER INFORMATION: AMIDATION=The C-terminus is Amidated
US-09-344-541A-32

Query Match 100.0%; Score 57; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 41
US-09-344-541A-33
; Sequence 33, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; APPLICANT: Lin, Jong J.
; APPLICANT: Gikonyo, J. G. Kinyua
; TITLE OF INVENTION: Derivative Compounds
; FILE REFERENCE: 11045US01
; CURRENT APPLICATION NUMBER: US/09/344,541A
; CURRENT FILING DATE: 1999-06-25
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 33
; LENGTH: 10
; TYPE: PRT
; ORGANISM: derived from human
; FEATURE:
; OTHER INFORMATION: XMP.527
; NAME/KEY: SITE
; LOCATION: (1)
; OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
; OTHER INFORMATION: acetyl
; NAME/KEY: SITE
; LOCATION: (9)
; OTHER INFORMATION: Position 9 is derivatized at the epsilon-amino
; OTHER INFORMATION: with: N-hydroxysulphosuccinimidyl-4-azidobenzoyl
; NAME/KEY: SITE
; LOCATION: (1)..(10)
; OTHER INFORMATION: Positions 1-10 are D-Amino Acids
; NAME/KEY: SITE
; LOCATION: (10)
; OTHER INFORMATION: AMIDATION=The C-terminus is Amidated
US-09-344-541A-33

Query Match 100.0%; Score 57; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 42
US-09-344-541A-35
; Sequence 35, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; APPLICANT: Lin, Jong J.
; APPLICANT: Gikonyo, J. G. Kinyua
; TITLE OF INVENTION: Derivative Compounds
; FILE REFERENCE: 11045US01
; CURRENT APPLICATION NUMBER: US/09/344,541A
; CURRENT FILING DATE: 1999-06-25
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 35
; LENGTH: 10
; TYPE: PRT
; ORGANISM: derived from human
; FEATURE:
; OTHER INFORMATION: XMP.533
; NAME/KEY: SITE
; LOCATION: (1)
; OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
; OTHER INFORMATION: 2- quinoxal carbonyl
; NAME/KEY: SITE
; LOCATION: (1)..(10)
; OTHER INFORMATION: Positions 1-10 are D-Amino Acids
; NAME/KEY: SITE
; LOCATION: (10)
; OTHER INFORMATION: AMIDATION=The C-terminus is Amidated
US-09-344-541A-35

Query Match 100.0%; Score 57; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 43
US-09-344-541A-36
; Sequence 36, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; APPLICANT: Lin, Jong J.
; APPLICANT: Gikonyo, J. G. Kinyua
; TITLE OF INVENTION: Derivative Compounds
; FILE REFERENCE: 11045US01
; CURRENT APPLICATION NUMBER: US/09/344,541A
; CURRENT FILING DATE: 1999-06-25
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 36
; LENGTH: 10
; TYPE: PRT
; ORGANISM: derived from human
; FEATURE:
; OTHER INFORMATION: XMP.534
; NAME/KEY: SITE
; LOCATION: (1)
; OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
; OTHER INFORMATION: biphenylene-carbonyl
; NAME/KEY: SITE
; LOCATION: (1)..(10)
; OTHER INFORMATION: Positions 1-10 are D-Amino Acids
; NAME/KEY: SITE
; LOCATION: (10)

; OTHER INFORMATION: AMIDATION The C-terminus is Amidated
US-09-344-541A-36

Query Match 100.0%; Score 57; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 44
US-09-344-541A-37
; Sequence 37, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; APPLICANT: Lin, Jong J.
; APPLICANT: Gikonyo, J. G. Kinyua
; TITLE OF INVENTION: Derivative Compounds
; FILE REFERENCE: 11045US01
; CURRENT APPLICATION NUMBER: US/09/344,541A
; CURRENT FILING DATE: 1999-06-25
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 37
; LENGTH: 10
; TYPE: PRT
; ORGANISM: derived from human
; FEATURE:
; OTHER INFORMATION: XMP.535
; NAME/KEY: SITE
; LOCATION: (1)
; OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
; OTHER INFORMATION: anthraquinone carbonyl
; NAME/KEY: SITE
; LOCATION: (1)..(10)
; OTHER INFORMATION: Positions 1-10 are D-Amino Acids
; NAME/KEY: SITE
; LOCATION: (10)
; OTHER INFORMATION: AMIDATION-The C-terminus is Amidated
US-09-344-541A-37

Query Match 100.0%; Score 57; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 45
US-09-344-541A-38
; Sequence 38, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; APPLICANT: Lin, Jong J.
; APPLICANT: Gikonyo, J. G. Kinyua
; TITLE OF INVENTION: Derivative Compounds
; FILE REFERENCE: 11045US01
; CURRENT APPLICATION NUMBER: US/09/344,541A
; CURRENT FILING DATE: 1999-06-25
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 38
; LENGTH: 10
; TYPE: PRT
; ORGANISM: derived from human
; FEATURE:
; OTHER INFORMATION: XMP.536
; NAME/KEY: SITE
; LOCATION: (1)
; OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
; OTHER INFORMATION: benzofuran-carbonyl
; NAME/KEY: SITE
; LOCATION: (1)..(10)
; OTHER INFORMATION: Positions 1-10 are D-Amino Acids
; NAME/KEY: SITE
; LOCATION: ()
; OTHER INFORMATION: AMIDATION=The C-terminus is Amidated
US-09-344-541A-38

Query Match 100.0%; Score 57; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 46
US-09-344-541A-39
; Sequence 39, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; APPLICANT: Lin, Jong J.
; APPLICANT: Gikonyo, J. G. Kinyua
; TITLE OF INVENTION: Derivative Compounds
; FILE REFERENCE: 11045US01
; CURRENT APPLICATION NUMBER: US/09/344,541A
; CURRENT FILING DATE: 1999-06-25
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 39
; LENGTH: 10
; TYPE: PRT
; ORGANISM: derived from human
; FEATURE:
; OTHER INFORMATION: XMP.545
; NAME/KEY: SITE
; LOCATION: (1)
; OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
; OTHER INFORMATION: indole-carbonyl
; NAME/KEY: SITE
; LOCATION: (1)..(10)
; OTHER INFORMATION: Positions 1-10 are D-Amino Acids
; NAME/KEY: SITE
; LOCATION: (10)
; OTHER INFORMATION: AMIDATION=The C-terminus is Amidated
US-09-344-541A-39

Query Match 100.0%; Score 57; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 47
US-09-344-541A-40
; Sequence 40, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; APPLICANT: Lin, Jong J.
; APPLICANT: Gikonyo, J. G. Kinyua
; TITLE OF INVENTION: Derivative Compounds
; FILE REFERENCE: 11045US01
; CURRENT APPLICATION NUMBER: US/09/344,541A

```
;  CURRENT FILING DATE:  1999-06-25
;  NUMBER OF SEQ ID NOS:  61
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 40
;   LENGTH: 10
;   TYPE: PRT
;   ORGANISM: derived from human
;   FEATURE:
;   OTHER INFORMATION: XMP.546
;   NAME/KEY: SITE
;   LOCATION: (1)
;   OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
;   OTHER INFORMATION: 1-isoquinoline-carbonyl
;   NAME/KEY: SITE
;   LOCATION: (1)..(10)
;   OTHER INFORMATION: Positions 1-10 are D-Amino Acids
;   NAME/KEY: SITE
;   LOCATION: (10)
;   OTHER INFORMATION: AMIDATION-The C-terminus is Amidated
US-09-344-541A-40

  Query Match           100.0%;  Score 57;  DB 4;  Length 10;
  Best Local Similarity  100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              :!:||||||:
Db          1 KWLIQLFHKK 10


RESULT 48
US-09-344-541A-41
; Sequence 41, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
;  APPLICANT:  Little, II, Roger G.
;  APPLICANT:  Lin, Jong J.
;  APPLICANT:  Gikonyo, J. G. Kinyua
;  TITLE OF INVENTION:  Derivative Compounds
;  FILE REFERENCE:  11045US01
;  CURRENT APPLICATION NUMBER: US/09/344,541A
;  CURRENT FILING DATE:  1999-06-25
;  NUMBER OF SEQ ID NOS:  61
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 41
;   LENGTH: 10
;   TYPE: PRT
;   ORGANISM: derived from human
;   FEATURE:
;   OTHER INFORMATION: XMP.560
;   NAME/KEY: SITE
;   LOCATION: (1)
;   OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
;   OTHER INFORMATION: salicylic-carbonyl
;   NAME/KEY: SITE
;   LOCATION: (1)..(10)
;   OTHER INFORMATION: Positions 1-10 are D-Amino Acids
;   NAME/KEY: SITE
;   LOCATION: (10)
;   OTHER INFORMATION: AMIDATION-The C-terminus is Amidated
US-09-344-541A-41

  Query Match           100.0%;  Score 57;  DB 4;  Length 10;
  Best Local Similarity  100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 49
US-09-344-541A-43
; Sequence 43, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
;  APPLICANT:  Little, II, Roger G.
;  APPLICANT:  Lin, Jong J.
;  APPLICANT:  Gikonyo, J. G. Kinyua
;  TITLE OF INVENTION:  Derivative Compounds
;  FILE REFERENCE:  11045US01
;  CURRENT APPLICATION NUMBER: US/09/344,541A
;  CURRENT FILING DATE:  1999-06-25
;  NUMBER OF SEQ ID NOS:  61
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 43
;   LENGTH: 10
;   TYPE: PRT
;   ORGANISM: derived from human
;   FEATURE:
;   OTHER INFORMATION: XMP.596
;   NAME/KEY: SITE
;   LOCATION: (1)
;   OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
;   OTHER INFORMATION: quinaldic-carbonyl
;   NAME/KEY: SITE
;   LOCATION: (1)..(10)
;   OTHER INFORMATION: Positions 1-10 are D-Amino Acids
;   NAME/KEY: SITE
;   LOCATION: (10)
;   OTHER INFORMATION: AMIDATION-The C-terminus is Amidated
US-09-344-541A-43

  Query Match           100.0%;  Score 57;  DB 4;  Length 10;
  Best Local Similarity  100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 50
US-09-344-541A-48
; Sequence 48, Application US/09344541A
; Patent No. 6355616
; GENERAL INFORMATION:
;  APPLICANT:  Little, II, Roger G.
;  APPLICANT:  Lin, Jong J.
;  APPLICANT:  Gikonyo, J. G. Kinyua
;  TITLE OF INVENTION:  Derivative Compounds
;  FILE REFERENCE:  11045US01
;  CURRENT APPLICATION NUMBER: US/09/344,541A
;  CURRENT FILING DATE:  1999-06-25
;  NUMBER OF SEQ ID NOS:  61
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 48
;   LENGTH: 10
;   TYPE: PRT
;   ORGANISM: derived from human
;   FEATURE:
;   OTHER INFORMATION: XMP.618
;   NAME/KEY: SITE
;   LOCATION: (1)
;   OTHER INFORMATION: Position 1 is derivatized at the alpha-amino with:
;   OTHER INFORMATION: 2-nitro-3-chloro-benzoyl
;   NAME/KEY: SITE
;   LOCATION: (1)..(10)
;   OTHER INFORMATION: Positions 1-10 are D-Amino Acids
;   NAME/KEY: SITE
;   LOCATION: (10)
;   OTHER INFORMATION: AMIDATION-The C-terminus is Amidated
US-09-344-541A-48

  Query Match           100.0%;  Score 57;  DB 4;  Length 10;
  Best Local Similarity  100.0%;  Pred. No. 0.0015;
```

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10
```

RESULT 51
US-09-344-541A-49
; Sequence 49, Application US/09344541A
; Patent No. 6355615
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; APPLICANT: Lin, Jong J.
; APPLICANT: Gikonyo, J. G. Kinyua
; TITLE OF INVENTION: Derivative Compounds
; FILE REFERENCE: 11045US01
; CURRENT APPLICATION NUMBER: US/09/344,541A
; CURRENT FILING DATE: 1999-06-25
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 49
; LENGTH: 10
; TYPE: PRT
; ORGANISM: derived from human
; FEATURE:
; OTHER INFORMATION: XMP.620
; NAME/KEY: SITE
; LOCATION: (1)..(2)
; OTHER INFORMATION: Positions 1-2 are D-amino acids
; NAME/KEY: SITE
; LOCATION: (9)..(10)
; OTHER INFORMATION: Positions 9-10 are D-amino acids
; NAME/KEY: SITE
; LOCATION: (3)..(8)
; OTHER INFORMATION: Positions 3-8 are L-amino acids
; NAME/KEY: SITE
; LOCATION: (10)
; OTHER INFORMATION: AMIDATION=The C-terminus is Amidated
US-09-344-541A-49

Query Match 100.0%; Score 57; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10
```

RESULT 52
US-09-545-112-3
; Sequence 3, Application US/09545112
; Patent No. 6376211
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; APPLICANT: Abrahamson, Susan
; TITLE OF INVENTION: AGENTS AND METHODS FOR INHIBITING F1/FO ATPASE
; FILE REFERENCE: 27129/36224
; CURRENT APPLICATION NUMBER: US/09/545,112
; CURRENT FILING DATE: 2000-04-06
; EARLIER APPLICATION NUMBER: 60/143,373
; EARLIER FILING DATE: 1999-07-12
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: artificial
; OTHER INFORMATION: peptide XMP.365
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (1)..(10)
; OTHER INFORMATION: Positions 1-10 are D-amino acids
; FEATURE:
; OTHER INFORMATION: The C-Terminus is Amidated
US-09-545-112-3

Query Match 100.0%; Score 57; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10
```

RESULT 53
US-09-545-112-5
; Sequence 5, Application US/09545112
; Patent No. 6376211
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; APPLICANT: Abrahamson, Susan
; TITLE OF INVENTION: AGENTS AND METHODS FOR INHIBITING F1/FO ATPASE
; FILE REFERENCE: 27129/36224
; CURRENT APPLICATION NUMBER: US/09/545,112
; CURRENT FILING DATE: 2000-04-06
; EARLIER APPLICATION NUMBER: 60/143,373
; EARLIER FILING DATE: 1999-07-12
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 5
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: artificial
; OTHER INFORMATION: peptide XMP.416
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (1)..(10)
; OTHER INFORMATION: Positions 1-10 are D-amino acids
; FEATURE:
; OTHER INFORMATION: The C-Terminus is Amidated
; FEATURE:
; OTHER INFORMATION: 8-amino-octanyl group; NH2-(CH2)7-CO at N-Terminus
US-09-545-112-5

Query Match 100.0%; Score 57; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10
```

RESULT 54
US-09-543-955-3
; Sequence 3, Application US/09543955
; Patent No. 6436660
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; TITLE OF INVENTION: IDENTIFICAITON OF NOVEL ANTIMICROBIAL AGENTS USING
; TITLE OF INVENTION: METABOLIC OXIDATION-REDUCTION INDICATOR DYES
; FILE REFERENCE: 27129/36226
; CURRENT APPLICATION NUMBER: US/09/543,955
; CURRENT FILING DATE: 2000-04-06
; EARLIER APPLICATION NUMBER: 60/143,290
; EARLIER FILING DATE: 1999-07-12
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3

; LENGTH: 10
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: artificial
; OTHER INFORMATION: peptide XMP.365
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (1)..(10)
; OTHER INFORMATION: Positions 1-10 are D-amino acids
; FEATURE:
; OTHER INFORMATION: The C-Terminus is Amidated
US-09-543-955-3

Query Match 100.0%; Score 57; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 55
US-09-543-955-5
; Sequence 5, Application US/09543955
; Patent No. 6436660
; GENERAL INFORMATION:
; APPLICANT: Little, II, Roger G.
; TITLE OF INVENTION: IDENTIFICAITON OF NOVEL ANTIMICROBIAL AGENTS USING
; TITLE OF INVENTION: METABOLIC OXIDATION-REDUCTION INDICATOR DYES
; FILE REFERENCE: 27129/36226
; CURRENT APPLICATION NUMBER: US/09/543,955
; CURRENT FILING DATE: 2000-04-06
; EARLIER APPLICATION NUMBER: 60/143,290
; EARLIER FILING DATE: 1999-07-12
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 5
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: artificial
; OTHER INFORMATION: peptide XMP.416
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (1)..(10)
; OTHER INFORMATION: Positions 1-10 are D-amino acids
; FEATURE:
; OTHER INFORMATION: The C-Terminus is Amidated
; FEATURE:
; OTHER INFORMATION: 8-amino-octanyl group; NH2-(CH2)7-CO at N-Terminus
US-09-543-955-5

Query Match 100.0%; Score 57; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||:|||
Db 1 KWLIQLFHKK 10

RESULT 56
PCT-US95-09262-126
; Sequence 126, Application PC/TUS9509262
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: Anti-Fungal Peptides
; NUMBER OF SEQUENCES: 206
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/09262
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/372,105
; FILING DATE: 13-JAN-95
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/306,473
; FILING DATE: 15-SEP-94
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/273,540
; FILING DATE: 11-JUL-94
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/209,762
; FILING DATE: 11-MAR-94
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/183,222
; FILING DATE: 14-JAN-94
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/093,202
; FILING DATE: 15-JUL-93
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/030,644
; FILING DATE: 12-MAR-93
; ATTORNEY/AGENT INFORMATION:
; NAME: Borun, Michael F.
; REGISTRATION NUMBER: 25,447
; REFERENCE/DOCKET NUMBER: 27129/10040
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 126:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: "XMP.293"
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: C-Terminus
; OTHER INFORMATION: /label= Amidation
; OTHER INFORMATION: /note= "The C-Terminus is Amidated"
PCT-US95-09262-126

Query Match 100.0%; Score 57; DB 5; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0015;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 57
PCT-US95-09262-194
; Sequence 194, Application PC/TUS9509262
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: Anti-Fungal Peptides

```
;    NUMBER OF SEQUENCES:  206
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60606-6402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/09262
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/372,105
;      FILING DATE:  13-JAN-95
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/306,473
;      FILING DATE:  15-SEP-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/273,540
;      FILING DATE:  11-JUL-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/209,762
;      FILING DATE:  11-MAR-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/183,222
;      FILING DATE:  14-JAN-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/093,202
;      FILING DATE:  15-JUL-93
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/030,644
;      FILING DATE:  12-MAR-93
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Borun, Michael F.
;      REGISTRATION NUMBER:  25,447
;      REFERENCE/DOCKET NUMBER:  27129/10040
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  194:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  10 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.363"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  1, 9 & 10
;      OTHER INFORMATION:  /label= D-Lys
;      OTHER INFORMATION:  /note= "Positions 1, 9 & 10 are D-lysine."
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  2
;      OTHER INFORMATION:  /label= D-Trp
;      OTHER INFORMATION:  /note= "Position 2 is D-tryptophan."
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated"
PCT-US95-09262-194

  Query Match           100.0%;  Score 57;  DB 5;  Length 10;
  Best Local Similarity  100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 58
PCT-US95-09262-195
; Sequence 195, Application PC/TUS9509262
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  Anti-Fungal Peptides
;    NUMBER OF SEQUENCES:  206
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60606-6402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/09262
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/372,105
;      FILING DATE:  13-JAN-95
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/306,473
;      FILING DATE:  15-SEP-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/273,540
;      FILING DATE:  11-JUL-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/209,762
;      FILING DATE:  11-MAR-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/183,222
;      FILING DATE:  14-JAN-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/093,202
;      FILING DATE:  15-JUL-93
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/030,644
;      FILING DATE:  12-MAR-93
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Borun, Michael F.
;      REGISTRATION NUMBER:  25,447
;      REFERENCE/DOCKET NUMBER:  27129/10040
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  195:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  10 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.364"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  1
;      OTHER INFORMATION:  /label= Acetylated
;      OTHER INFORMATION:  /note= "Position 1 is acetylated"
;    FEATURE:
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;       NAME/KEY:  Modified-site
;       LOCATION:  1, 9 & 10
;       OTHER INFORMATION:  /label= D-Lys
;       OTHER INFORMATION:  /note= "Positions 1, 9 & 10 are D-lysine."
;     FEATURE:
;       NAME/KEY:  Modified-site
;       LOCATION:  2
;       OTHER INFORMATION:  /label= D-Trp
;       OTHER INFORMATION:  /note= "Position 2 is D-tryptophan."
;     FEATURE:
;       NAME/KEY:  Modified-site
;       LOCATION:  C-Terminus
;       OTHER INFORMATION:  /label= Amidation
;       OTHER INFORMATION:  /note= "The C-Terminus is Amidated"
PCT-US95-09262-195

  Query Match             100.0%;  Score 57;  DB 5;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 59
PCT-US95-09262-196
; Sequence 196, Application PC/TUS9509262
;  GENERAL INFORMATION:
;     APPLICANT:
;     TITLE OF INVENTION:  Anti-Fungal Peptides
;     NUMBER OF SEQUENCES:  206
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;       STREET:  6300 Sears Tower, 233 South Wacker Drive
;       CITY:  Chicago
;       STATE:  Illinois
;       COUNTRY:  United States of America
;       ZIP:  60606-6402
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  PCT/US95/09262
;       FILING DATE:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/372,105
;       FILING DATE:  13-JAN-95
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/306,473
;       FILING DATE:  15-SEP-94
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/273,540
;       FILING DATE:  11-JUL-94
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/209,762
;       FILING DATE:  11-MAR-94
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/183,222
;       FILING DATE:  14-JAN-94
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/093,202
;       FILING DATE:  15-JUL-93
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/030,644
;       FILING DATE:  12-MAR-93
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Borun, Michael F.
;       REGISTRATION NUMBER:  25,447
;       REFERENCE/DOCKET NUMBER:  27129/10040
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  312/474-6300
;       TELEFAX:  312/474-0448
;       TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  196:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  10 amino acids
;       TYPE:  amino acid
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  peptide
;     FEATURE:
;       NAME/KEY:  misc_feature
;       OTHER INFORMATION:  "XMP.365"
;     FEATURE:
;       NAME/KEY:  Modified-site
;       LOCATION:  1-10
;       OTHER INFORMATION:  /label= D-Amino Acids
;       OTHER INFORMATION:  /note= "Positions 1-10 are D-amino acids"
;     FEATURE:
;       NAME/KEY:  Modified-site
;       LOCATION:  C-Terminus
;       OTHER INFORMATION:  /label= Amidation
;       OTHER INFORMATION:  /note= "The C-Terminus is Amidated"
PCT-US95-09262-196

  Query Match             100.0%;  Score 57;  DB 5;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 60
PCT-US95-09262-197
; Sequence 197, Application PC/TUS9509262
;  GENERAL INFORMATION:
;     APPLICANT:
;     TITLE OF INVENTION:  Anti-Fungal Peptides
;     NUMBER OF SEQUENCES:  206
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;       STREET:  6300 Sears Tower, 233 South Wacker Drive
;       CITY:  Chicago
;       STATE:  Illinois
;       COUNTRY:  United States of America
;       ZIP:  60606-6402
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  PCT/US95/09262
;       FILING DATE:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/372,105
;       FILING DATE:  13-JAN-95
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/306,473
;       FILING DATE:  15-SEP-94
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/273,540
;       FILING DATE:  11-JUL-94
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/209,762
;       FILING DATE:  11-MAR-94
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/183,222
;       FILING DATE:  14-JAN-94
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/093,202
;       FILING DATE:  15-JUL-93
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;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/030,644
;      FILING DATE:  12-MAR-93
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Borun, Michael F.
;      REGISTRATION NUMBER:  25,447
;      REFERENCE/DOCKET NUMBER:  27129/10040
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  197:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  10 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.366"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  1
;      OTHER INFORMATION:  /label= Acetylated
;      OTHER INFORMATION:  /note= "Position 1 is acetylated"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  1-10
;      OTHER INFORMATION:  /label= D-Amino Acids
;      OTHER INFORMATION:  /note= "Positions 1-10 are D-amino acids"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated"
PCT-US95-09262-197

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  Best Local Similarity   100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 61
PCT-US95-09262-204
; Sequence 204, Application PC/TUS9509262
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  Anti-Fungal Peptides
;    NUMBER OF SEQUENCES:  206
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60606-6402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/09262
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/372,105
;      FILING DATE:  13-JAN-95
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/306,473
;      FILING DATE:  15-SEP-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/273,540
;      FILING DATE:  11-JUL-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/209,762
;      FILING DATE:  11-MAR-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/183,222
;      FILING DATE:  14-JAN-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/093,202
;      FILING DATE:  15-JUL-93
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/030,644
;      FILING DATE:  12-MAR-93
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Borun, Michael F.
;      REGISTRATION NUMBER:  25,447
;      REFERENCE/DOCKET NUMBER:  27129/10040
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  204:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  10 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.373"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  1
;      OTHER INFORMATION:  /label= Acetylated
;      OTHER INFORMATION:  /note= "Position 1 is acetylated"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated"
PCT-US95-09262-204

  Query Match             100.0%;  Score 57;  DB 5;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0015;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 62
US-08-621-803-155
; Sequence 155, Application US/08621803
; Patent No. 5851802
;  GENERAL INFORMATION:
;    APPLICANT:  Better, Marc D.
;    TITLE OF INVENTION:  Methods for Recombinant Microbial Production of
;    TITLE OF INVENTION:  Fusion Proteins and BPI-Derived Peptides
;    NUMBER OF SEQUENCES:  265
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60606-6402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
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;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/621,803
;       FILING DATE:  22-MAR-1996
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Borun, Michael F.
;       REGISTRATION NUMBER:  25,447
;       REFERENCE/DOCKET NUMBER:  27129/33199
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  312/474-6300
;       TELEFAX:  312/474-0448
;       TELEX:  25-3856
;   INFORMATION FOR SEQ ID NO:  155:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  11 amino acids
;       TYPE:  amino acid
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  peptide
;     FEATURE:
;       NAME/KEY:  misc_feature
;       OTHER INFORMATION:  "XMP.289"
;     FEATURE:
;       NAME/KEY:  Modified-site
;       LOCATION:  C-Terminus
;       OTHER INFORMATION:  /label= Amidation
;       OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
US-08-621-803-155

  Query Match             100.0%;  Score 57;  DB 2;  Length 11;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          2 KWLIQLFHKK 11


RESULT 63
US-08-621-803-208
; Sequence 208, Application US/08621803
; Patent No. 5851802
;  GENERAL INFORMATION:
;    APPLICANT:  Better, Marc D.
;    TITLE OF INVENTION:  Methods for Recombinant Microbial Production of
;    TITLE OF INVENTION:  Fusion Proteins and BPI-Derived Peptides
;    NUMBER OF SEQUENCES:  265
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60606-6402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/621,803
;      FILING DATE:  22-MAR-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Borun, Michael F.
;      REGISTRATION NUMBER:  25,447
;      REFERENCE/DOCKET NUMBER:  27129/33199
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  208:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  11 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.352"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
US-08-621-803-208

  Query Match             100.0%;  Score 57;  DB 2;  Length 11;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          2 KWLIQLFHKK 11


RESULT 64
US-08-621-259A-122
; Sequence 122, Application US/08621259A
; Patent No. 5858974
;  GENERAL INFORMATION:
;    APPLICANT:  Little II, Roger G
;    APPLICANT:  Lim, Edward
;    APPLICANT:  Fadem, Mitchell B.
;    TITLE OF INVENTION:  Anti-Fungal Peptides
;    NUMBER OF SEQUENCES:  252
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  McAndrews, Held & Malloy, Ltd.
;      STREET:  500 West Madison Street
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60661
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/621,259A
;      FILING DATE:  21-MAR-1996
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/504,841
;      FILING DATE:  20-JUL-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  McNicholas, Janet M.
;      REGISTRATION NUMBER:  32,918
;      REFERENCE/DOCKET NUMBER:  11021US02
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/707-8889
;      TELEFAX:  312/707-9155
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  122:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  11 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.289"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
US-08-621-259A-122
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  Query Match             100.0%;  Score 57;  DB 2;  Length 11;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              |||||||||:|
Db          2 KWLIQLFHKK 11


RESULT 65
US-08-621-259A-183
; Sequence 183, Application US/08621259A
; Patent No. 5858974
;  GENERAL INFORMATION:
;    APPLICANT:  Little II, Roger G
;    APPLICANT:  Lim, Edward
;    APPLICANT:  Fadem, Mitchell B.
;    TITLE OF INVENTION:  Anti-Fungal Peptides
;    NUMBER OF SEQUENCES:  252
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  McAndrews, Held & Malloy, Ltd.
;      STREET:  500 West Madison Street
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60661
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/621,259A
;      FILING DATE:  21-MAR-1996
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/504,841
;      FILING DATE:  20-JUL-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  McNicholas, Janet M.
;      REGISTRATION NUMBER:  32,918
;      REFERENCE/DOCKET NUMBER:  11021US02
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/707-8889
;      TELEFAX:  312/707-9155
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  183:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  11 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.352"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
US-08-621-259A-183

  Query Match             100.0%;  Score 57;  DB 2;  Length 11;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          2 KWLIQLFHKK 11


RESULT 66
US-09-217-352-155
; Sequence 155, Application US/09217352
; Patent No. 6274344
;  GENERAL INFORMATION:
;    APPLICANT:  Better, Marc D.
;    TITLE OF INVENTION:  Methods for Recombinant Microbial Production of
;    TITLE OF INVENTION:  Fusion Proteins and BPI-Derived Peptides
;    NUMBER OF SEQUENCES:  265
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60606-6402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/217,352
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/621,803
;      FILING DATE:  22-MAR-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Borun, Michael F.
;      REGISTRATION NUMBER:  25,447
;      REFERENCE/DOCKET NUMBER:  27129/33199
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  155:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  11 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.289"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
US-09-217-352-155

  Query Match             100.0%;  Score 57;  DB 3;  Length 11;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          2 KWLIQLFHKK 11


RESULT 67
US-09-217-352-208
; Sequence 208, Application US/09217352
; Patent No. 6274344
;  GENERAL INFORMATION:
;    APPLICANT:  Better, Marc D.
;    TITLE OF INVENTION:  Methods for Recombinant Microbial Production of
;    TITLE OF INVENTION:  Fusion Proteins and BPI-Derived Peptides
;    NUMBER OF SEQUENCES:  265
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
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;       ZIP:  60606-6402
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/09/217,352
;       FILING DATE:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/621,803
;       FILING DATE:  22-MAR-1996
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Borun, Michael F.
;       REGISTRATION NUMBER:  25,447
;       REFERENCE/DOCKET NUMBER:  27129/33199
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  312/474-6300
;       TELEFAX:  312/474-0448
;       TELEX:  25-3856
;   INFORMATION FOR SEQ ID NO:  208:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  11 amino acids
;       TYPE:  amino acid
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  peptide
;     FEATURE:
;       NAME/KEY:  misc_feature
;       OTHER INFORMATION:  "XMP.352"
;     FEATURE:
;       NAME/KEY:  Modified-site
;       LOCATION:  C-Terminus
;       OTHER INFORMATION:  /label= Amidation
;       OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
US-09-217-352-208

  Query Match             100.0%;  Score 57;  DB 3;  Length 11;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          2 KWLIQLFHKK 11


RESULT 68
PCT-US95-09262-122
; Sequence 122, Application PC/TUS9509262
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  Anti-Fungal Peptides
;    NUMBER OF SEQUENCES:  206
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60606-6402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/09262
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/372,105
;      FILING DATE:  13-JAN-95
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/306,473
;      FILING DATE:  15-SEP-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/273,540
;      FILING DATE:  11-JUL-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/209,762
;      FILING DATE:  11-MAR-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/183,222
;      FILING DATE:  14-JAN-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/093,202
;      FILING DATE:  15-JUL-93
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/030,644
;      FILING DATE:  12-MAR-93
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Borun, Michael F.
;      REGISTRATION NUMBER:  25,447
;      REFERENCE/DOCKET NUMBER:  27129/10040
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  122:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  11 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.289"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated"
PCT-US95-09262-122

  Query Match             100.0%;  Score 57;  DB 5;  Length 11;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          2 KWLIQLFHKK 11


RESULT 69
PCT-US95-09262-183
; Sequence 183, Application PC/TUS9509262
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  Anti-Fungal Peptides
;    NUMBER OF SEQUENCES:  206
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60606-6402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/09262
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/372,105
;      FILING DATE:  13-JAN-95
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;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/306,473
;      FILING DATE:  15-SEP-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/273,540
;      FILING DATE:  11-JUL-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/209,762
;      FILING DATE:  11-MAR-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/183,222
;      FILING DATE:  14-JAN-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/093,202
;      FILING DATE:  15-JUL-93
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/030,644
;      FILING DATE:  12-MAR-93
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Borun, Michael F.
;      REGISTRATION NUMBER:  25,447
;      REFERENCE/DOCKET NUMBER:  27129/10040
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  183:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  11 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.352"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated"
PCT-US95-09262-183

  Query Match             100.0%;  Score 57;  DB 5;  Length 11;
  Best Local Similarity   100.0%;  Pred. No. 0.0016;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          2 KWLIQLFHKK 11


RESULT 70
US-08-621-803-152
; Sequence 152, Application US/08621803
; Patent No. 5851802
;  GENERAL INFORMATION:
;    APPLICANT:  Better, Marc D.
;    TITLE OF INVENTION:  Methods for Recombinant Microbial Production of
;    TITLE OF INVENTION:  Fusion Proteins and BPI-Derived Peptides
;    NUMBER OF SEQUENCES:  265
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60606-6402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/621,803
;      FILING DATE:  22-MAR-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Borun, Michael F.
;      REGISTRATION NUMBER:  25,447
;      REFERENCE/DOCKET NUMBER:  27129/33199
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  152:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  12 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.286"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
US 08-621-803-152

  Query Match             100.0%;  Score 57;  DB 2;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 0.0018;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          3 KWLIQLFHKK 12


RESULT 71
US-08-621-259A-119
; Sequence 119, Application US/08621259A
; Patent No. 5858974
;  GENERAL INFORMATION:
;    APPLICANT:  Little II, Roger G
;    APPLICANT:  Lim, Edward
;    APPLICANT:  Fadem, Mitchell B.
;    TITLE OF INVENTION:  Anti-Fungal Peptides
;    NUMBER OF SEQUENCES:  252
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  McAndrews, Held & Malloy, Ltd.
;      STREET:  500 West Madison Street
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60661
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/621,259A
;      FILING DATE:  21-MAR-1996
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/504,841
;      FILING DATE:  20-JUL-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  McNicholas, Janet M.
;      REGISTRATION NUMBER:  32,918
;      REFERENCE/DOCKET NUMBER:  11021US02
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/707-8889
;      TELEFAX:  312/707-9155
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  119:
;    SEQUENCE CHARACTERISTICS:
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;       LENGTH:  12 amino acids
;       TYPE:  amino acid
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  peptide
;     FEATURE:
;       NAME/KEY:  misc_feature
;       OTHER INFORMATION:  "XMP.286"
;     FEATURE:
;       NAME/KEY:  Modified-site
;       LOCATION:  C-Terminus
;       OTHER INFORMATION:  /label= Amidation
;       OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
US-08-621-259A-119

  Query Match             100.0%;  Score 57;  DB 2;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 0.0018;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          3 KWLIQLFHKK 12


RESULT 72
US-09-217-352-152
; Sequence 152, Application US/09217352
; Patent No. 6274344
;  GENERAL INFORMATION:
;    APPLICANT:  Better, Marc D.
;    TITLE OF INVENTION:  Methods for Recombinant Microbial Production of
;    TITLE OF INVENTION:  Fusion Proteins and BPI-Derived Peptides
;    NUMBER OF SEQUENCES:  265
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60606-6402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/217,352
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/621,803
;      FILING DATE:  22-MAR-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Borun, Michael F.
;      REGISTRATION NUMBER:  25,447
;      REFERENCE/DOCKET NUMBER:  27129/33199
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  152:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  12 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.286"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
US-09-217-352-152

  Query Match             100.0%;  Score 57;  DB 3;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 0.0018;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          3 KWLIQLFHKK 12


RESULT 73
PCT-US95-09262-119
; Sequence 119, Application PC/TUS9509262
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  Anti-Fungal Peptides
;    NUMBER OF SEQUENCES:  206
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60606-6402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/09262
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/372,105
;      FILING DATE:  13-JAN-95
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/306,473
;      FILING DATE:  15-SEP-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/273,540
;      FILING DATE:  11-JUL-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/209,762
;      FILING DATE:  11-MAR-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/183,222
;      FILING DATE:  14-JAN-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/093,202
;      FILING DATE:  15-JUL-93
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/030,644
;      FILING DATE:  12-MAR-93
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Borun, Michael F.
;      REGISTRATION NUMBER:  25,447
;      REFERENCE/DOCKET NUMBER:  27129/10040
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  119:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  12 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.286"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
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;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated"
PCT-US95-09262-119

  Query Match             100.0%;  Score 57;  DB 5;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 0.0018;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||:||||
Db          3 KWLIQLFHKK 12


RESULT 74
US-08-621-803-150
; Sequence 150, Application US/08621803
; Patent No. 5851802
;  GENERAL INFORMATION:
;    APPLICANT:  Better, Marc D.
;    TITLE OF INVENTION:  Methods for Recombinant Microbial Production of
;    TITLE OF INVENTION:  Fusion Proteins and BPI-Derived Peptides
;    NUMBER OF SEQUENCES:  265
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60606-6402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/621,803
;      FILING DATE:  22-MAR-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Borun, Michael F.
;      REGISTRATION NUMBER:  25,447
;      REFERENCE/DOCKET NUMBER:  27129/33199
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  150:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  13 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.284"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
US-08-621-803-150

  Query Match             100.0%;  Score 57;  DB 2;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 0.0019;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          4 KWLIQLFHKK 13


RESULT 75
US-08-621-259A-117
; Sequence 117, Application US/08621259A
; Patent No. 5858974
;  GENERAL INFORMATION:
;    APPLICANT:  Little II, Roger G
;    APPLICANT:  Lim, Edward
;    APPLICANT:  Fadem, Mitchell B.
;    TITLE OF INVENTION:  Anti-Fungal Peptides
;    NUMBER OF SEQUENCES:  252
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  McAndrews, Held & Malloy, Ltd.
;      STREET:  500 West Madison Street
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60661
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/621,259A
;      FILING DATE:  21-MAR-1996
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/504,841
;      FILING DATE:  20-JUL-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  McNicholas, Janet M.
;      REGISTRATION NUMBER:  32,918
;      REFERENCE/DOCKET NUMBER:  11021US02
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/707-8889
;      TELEFAX:  312/707-9155
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  117:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  13 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.284"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
US-08-621-259A-117

  Query Match             100.0%;  Score 57;  DB 2;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 0.0019;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          4 KWLIQLFHKK 13


RESULT 76
US-09-217-352-150
; Sequence 150, Application US/09217352
; Patent No. 6274344
;  GENERAL INFORMATION:
;    APPLICANT:  Better, Marc D.
;    TITLE OF INVENTION:  Methods for Recombinant Microbial Production of
;    TITLE OF INVENTION:  Fusion Proteins and BPI-Derived Peptides
;    NUMBER OF SEQUENCES:  265
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
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;       ZIP:  60606-6402
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/09/217,352
;       FILING DATE:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/621,803
;       FILING DATE:  22-MAR-1996
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Borun, Michael F.
;       REGISTRATION NUMBER:  25,447
;       REFERENCE/DOCKET NUMBER:  27129/33199
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  312/474-6300
;       TELEFAX:  312/474-0448
;       TELEX:  25-3856
;   INFORMATION FOR SEQ ID NO:  150:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  13 amino acids
;       TYPE:  amino acid
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  peptide
;     FEATURE:
;       NAME/KEY:  misc_feature
;       OTHER INFORMATION:  "XMP.284"
;     FEATURE:
;       NAME/KEY:  Modified-site
;       LOCATION:  C-Terminus
;       OTHER INFORMATION:  /label= Amidation
;       OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
US-09-217-352-150

  Query Match             100.0%;  Score 57;  DB 3;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 0.0019;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          4 KWLIQLFHKK 13


RESULT 77
PCT-US95-09262-117
; Sequence 117, Application PC/TUS9509262
;  GENERAL INFORMATION:
;     APPLICANT:
;     TITLE OF INVENTION:  Anti-Fungal Peptides
;     NUMBER OF SEQUENCES:  206
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;       STREET:  6300 Sears Tower, 233 South Wacker Drive
;       CITY:  Chicago
;       STATE:  Illinois
;       COUNTRY:  United States of America
;       ZIP:  60606-6402
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  PCT/US95/09262
;       FILING DATE:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/372,105
;       FILING DATE:  13-JAN-95
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/306,473
;       FILING DATE:  15-SEP-94
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/273,540
;       FILING DATE:  11-JUL-94
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/209,762
;       FILING DATE:  11-MAR-94
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/183,222
;       FILING DATE:  14-JAN-94
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/093,202
;       FILING DATE:  15-JUL-93
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/030,644
;       FILING DATE:  12-MAR-93
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Borun, Michael F.
;       REGISTRATION NUMBER:  25,447
;       REFERENCE/DOCKET NUMBER:  27129/10040
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  312/474-6300
;       TELEFAX:  312/474-0448
;       TELEX:  25-3856
;   INFORMATION FOR SEQ ID NO:  117:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  13 amino acids
;       TYPE:  amino acid
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  peptide
;     FEATURE:
;       NAME/KEY:  misc_feature
;       OTHER INFORMATION:  "XMP.284"
;     FEATURE:
;       NAME/KEY:  Modified-site
;       LOCATION:  C-Terminus
;       OTHER INFORMATION:  /label= Amidation
;       OTHER INFORMATION:  /note= "The C-Terminus is Amidated"
PCT-US95-09262-117

  Query Match             100.0%;  Score 57;  DB 5;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 0.0019;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          4 KWLIQLFHKK 13


RESULT 78
US-08-311-611A-92
; Sequence 92, Application US/08311611A
; Patent No. 5523288
;  GENERAL INFORMATION:
;     APPLICANT:  Cohen, Jonathan
;     APPLICANT:  Kung, Ada H.C.
;     APPLICANT:  Lambert, Jr., Lewis H.
;     TITLE OF INVENTION:  Method for Treating Gram-Negative Bacterial
;     TITLE OF INVENTION:  Infection by Administration of
;     TITLE OF INVENTION:  Bactericidal/Permeability-Increasing
;     TITLE OF INVENTION:
;     NUMBER OF SEQUENCES:  227
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;       STREET:  6300 Sears Tower, 233 South Wacker Drive
;       CITY:  Chicago
;       STATE:  Illinois
;       COUNTRY:  USA
;       ZIP:  60606-6402
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25
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;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/311,611A
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/273,401
;      FILING DATE:  11-JUL-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/125,651
;      FILING DATE:  22-SEP-1993
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Sharp, Jeffrey S.
;      REGISTRATION NUMBER:  31,879
;      REFERENCE/DOCKET NUMBER:  32251
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  92:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  14 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "BPI.97"
US-08-311-611A-92

  Query Match           100.0%;  Score 57;  DB 1;  Length 14;
  Best Local Similarity  100.0%;  Pred. No. 0.002;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          5 KWLIQLFHKK 14


RESULT 79
US-08-372-783-92
; Sequence 92, Application US/08372783
; Patent No. 5578572
;  GENERAL INFORMATION:
;    APPLICANT:  Horwitz, Arnold H.
;    APPLICANT:  Lambert, Lewis H.
;    APPLICANT:  Little, Roger G.
;    TITLE OF INVENTION:  Anti-Gram-Positive Bacterial Methods and
;    TITLE OF INVENTION:  Materials
;    NUMBER OF SEQUENCES:  237
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  USA
;      ZIP:  60606-6402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/372,783
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/273,540
;      FILING DATE:  11-JUL-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/209,762
;      FILING DATE:  11-MAR-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/183,222
;      FILING DATE:  14-JAN-1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Rin-Laures, Li-Hsien
;      REGISTRATION NUMBER:  33,547
;      REFERENCE/DOCKET NUMBER:  27129/32415
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  92:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  14 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.97"
US-08-372-783-92

  Query Match           100.0%;  Score 57;  DB 1;  Length 14;
  Best Local Similarity  100.0%;  Pred. No. 0.002;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          5 KWLIQLFHKK 14


RESULT 80
US-08-372-105-92
; Sequence 92, Application US/08372105
; Patent No. 5627153
;  GENERAL INFORMATION:
;    APPLICANT:  Little, Roger G.
;    APPLICANT:  Lim, Edward
;    APPLICANT:  Lambert, Lewis H.
;    APPLICANT:  Scannon, Patrick J.
;    TITLE OF INVENTION:  Anti-Fungal Materials and Methods
;    NUMBER OF SEQUENCES:  227
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60606-6402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/372,105
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/273,540
;      FILING DATE:  11-JUL-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/209,762
;      FILING DATE:  11-MAR-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/183,222
;      FILING DATE:  14-JAN-1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Rin-Laures, Li-Hsien
;      REGISTRATION NUMBER:  33,547
;      REFERENCE/DOCKET NUMBER:  27129/32415
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  92:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  14 amino acids
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;       TYPE:  amino acid
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  peptide
;     FEATURE:
;       NAME/KEY:  misc_feature
;       OTHER INFORMATION:  "XMP.97"
US-08-372-105-92

  Query Match             100.0%;  Score 57;  DB 1;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 0.002;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          5 KWLIQLFHKK 14


RESULT 81
US-08-306-473A-92
; Sequence 92, Application US/08306473A
; Patent No. 5652332
;  GENERAL INFORMATION:
;    APPLICANT:  Little, Roger G.
;    TITLE OF INVENTION:  Biologically Active Peptides from
;    TITLE OF INVENTION:  Functional Domains of Bactericidal/
;    TITLE OF INVENTION:  Permeability-Increasing Protein and
;    TITLE OF INVENTION:  Uses Thereof
;    NUMBER OF SEQUENCES:  226
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Allegretti & Witcoff, Ltd.
;      STREET:  Suite 3000, 10 S. Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  USA
;      ZIP:  60606
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/306,473A
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/209,762
;      FILING DATE:  11-MAR-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/183,222
;      FILING DATE:  14-JAN-1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  McDonnell, John J.
;      REGISTRATION NUMBER:  26,949
;      REFERENCE/DOCKET NUMBER:  93,1133-
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312-715-1000
;      TELEFAX:  312-715-1234
;  INFORMATION FOR SEQ ID NO:  92:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  14 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "BPI.97"
US-08-306-473A-92

  Query Match             100.0%;  Score 57;  DB 1;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 0.002;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          5 KWLIQLFHKK 14


RESULT 82
US-08-209-762-92
; Sequence 92, Application US/08209762
; Patent No. 5733872
;  GENERAL INFORMATION:
;    APPLICANT:  Little, Roger G.
;    TITLE OF INVENTION:  Biologically Active Peptides from
;    TITLE OF INVENTION:  Functional Domains of Bactericidal/Permeability-Increasing
;    TITLE OF INVENTION:  Protein and Uses Thereof
;    NUMBER OF SEQUENCES:  98
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Allegretti & Witcoff, Ltd.
;      STREET:  10 South Wacker Drive, Suite 3000
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  USA
;      ZIP:  60606
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/209,762
;      FILING DATE:  11-JAN-1994
;      CLASSIFICATION:  514
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  No. 5733872nan, Kevin E
;      REGISTRATION NUMBER:  35,303
;      REFERENCE/DOCKET NUMBER:  93,1133
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312-715-1000
;      TELEFAX:  312-715-1234
;      TELEX:  910-221-5317
;  INFORMATION FOR SEQ ID NO:  92:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  14 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "BPI.97"
US-08-209-762-92

  Query Match             100.0%;  Score 57;  DB 1;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 0.002;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          5 KWLIQLFHKK 14


RESULT 83
US-08-473-344-92
; Sequence 92, Application US/08473344
; Patent No. 5763567
;  GENERAL INFORMATION:
;    APPLICANT:  Little, Roger G
;    TITLE OF INVENTION:  Biologically Active Peptides from
;    TITLE OF INVENTION:  Functional Domains of Bactericidal/Permeability-Increasing
;    TITLE OF INVENTION:  Protein and Uses Thereof
;    NUMBER OF SEQUENCES:  98
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Banner & Allegretti, Ltd.
;      STREET:  10  South Wacker Drive, Suite 3000
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  USA
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; ZIP: 60606
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/473,344
; FILING DATE: 7-JUN-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/306,473
; FILING DATE: 15-SEP-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/209,762
; FILING DATE: 11-MAR-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: McDonnell, John J.
; REGISTRATION NUMBER: 26,949
; REFERENCE/DOCKET NUMBER: 93,1133-J
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312-715-1000
; TELEFAX: 312-715-1234
; TELEX: 910-221-5317
; INFORMATION FOR SEQ ID NO: 92:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 14 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: "BPI.97"
US-08-473-344-92

Query Match 100.0%; Score 57; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.002;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 5 KWLIQLFHKK 14

RESULT 84
US-08-621-803-86
; Sequence 86, Application US/08621803
; Patent No. 5851802
; GENERAL INFORMATION:
; APPLICANT: Better, Marc D.
; TITLE OF INVENTION: Methods for Recombinant Microbial Production of
; TITLE OF INVENTION: Fusion Proteins and BPI-Derived Peptides
; NUMBER OF SEQUENCES: 265
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/621,803
; FILING DATE: 22-MAR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Borun, Michael F.
; REGISTRATION NUMBER: 25,447
; REFERENCE/DOCKET NUMBER: 27129/33199
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 86:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 14 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: "XMP.97"
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: C-Terminus
; OTHER INFORMATION: /label= Amidation
; OTHER INFORMATION: /note= "The C-Terminus is Amidated."
US-08-621-803-86

Query Match 100.0%; Score 57; DB 2; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.002;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 5 KWLIQLFHKK 14

RESULT 85
US-08-485-445A-92
; Sequence 92, Application US/08485445A
; Patent No. 5856438
; GENERAL INFORMATION:
; APPLICANT: Little, Roger G.
; TITLE OF INVENTION: Biologically Active Peptides from
; TITLE OF INVENTION: Functional Domains of Bactericidal/
; TITLE OF INVENTION: Permeability-Increasing Protein and
; TITLE OF INVENTION: Uses Thereof
; NUMBER OF SEQUENCES: 226
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: McAndrews, Held & Malloy, Ltd.
; STREET: Suite 3400, 500 West Madison Street
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60661
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/485,445A
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/209,762
; FILING DATE: 11-MAR-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/183,222
; FILING DATE: 14-JAN-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: McNicholas, Janet M.
; REGISTRATION NUMBER: 32,918
; REFERENCE/DOCKET NUMBER: 11018US08/100-224.P4.C1B
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312-707-8889
; TELEFAX: 312-707-9155
; INFORMATION FOR SEQ ID NO: 92:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 14 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:

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;       NAME/KEY:  misc_feature
;       OTHER INFORMATION:  "BPI.97"
US-08-485-445A-92

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  Best Local Similarity   100.0%;  Pred. No. 0.002;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          5 KWLIQLFHKK 14


RESULT 86
US-08-621-259A-31
; Sequence 31, Application US/08621259A
; Patent No. 5858974
;  GENERAL INFORMATION:
;    APPLICANT:  Little II, Roger G
;    APPLICANT:  Lim, Edward
;    APPLICANT:  Fadem, Mitchell B.
;    TITLE OF INVENTION:  Anti-Fungal Peptides
;    NUMBER OF SEQUENCES:  252
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  McAndrews, Held & Malloy, Ltd.
;      STREET:  500 West Madison Street
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60661
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/621,259A
;      FILING DATE:  21-MAR-1996
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/504,841
;      FILING DATE:  20-JUL-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  McNicholas, Janet M.
;      REGISTRATION NUMBER:  32,918
;      REFERENCE/DOCKET NUMBER:  11021US02
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/707-8889
;      TELEFAX:  312/707-9155
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  31:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  14 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.97"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
US-08-621-259A-31

  Query Match             100.0%;  Score 57;  DB 2;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 0.002;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          5 KWLIQLFHKK 14


RESULT 87
US-09-119-263-92
; Sequence 92, Application US/09119263
; Patent No. 6054431
;  GENERAL INFORMATION:
;    APPLICANT:  Horwitz, Arnold H.
;    APPLICANT:  Lambert, Lewis H.
;    APPLICANT:  Little, Roger G.
;    TITLE OF INVENTION:  Anti-Gram-Positive Bacterial Methods and
;    TITLE OF INVENTION:  Materials
;    NUMBER OF SEQUENCES:  237
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  USA
;      ZIP:  60606-6402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/119,263
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/758,116
;      FILING DATE:
;      APPLICATION NUMBER:  08/372,783
;      FILING DATE:
;      APPLICATION NUMBER:  08/273,540
;      FILING DATE:  11-JUL-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/209,762
;      FILING DATE:  11-MAR-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/183,222
;      FILING DATE:  14-JAN-1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Rin-Laures, Li-Hsien
;      REGISTRATION NUMBER:  33,547
;      REFERENCE/DOCKET NUMBER:  27129/32415
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  92:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  14 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.97"
US-09-119-263-92

  Query Match             100.0%;  Score 57;  DB 3;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 0.002;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          5 KWLIQLFHKK 14


RESULT 88
US-08-657-162-92
; Sequence 92, Application US/08657162
; Patent No. 6140306
;  GENERAL INFORMATION:
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```
;    APPLICANT:  Cohen, Jonathan
;    APPLICANT:  Kung, Ada H.C.
;    APPLICANT:  Lambert, Jr., Lewis H.
;    TITLE OF INVENTION:  Method for Treating Gram-Negative Bacterial
;    TITLE OF INVENTION:  Infection by Administration of
;    TITLE OF INVENTION:  Bactericidal/Permeability-Increasing
;    TITLE OF INVENTION:
;    NUMBER OF SEQUENCES:  227
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  USA
;      ZIP:  60606-6402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/657,162
;      FILING DATE:  03-JUN-1996
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/311,611
;      FILING DATE:
;      APPLICATION NUMBER:  08/273,401
;      FILING DATE:  11-JUL-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/125,651
;      FILING DATE:  22-SEP-1993
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Sharp, Jeffrey S.
;      REGISTRATION NUMBER:  31,879
;      REFERENCE/DOCKET NUMBER:  32251
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  92:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  14 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "BPI.97"
US-08-657-162-92

  Query Match           100.0%;  Score 57;  DB 3;  Length 14;
  Best Local Similarity  100.0%;  Pred. No. 0.002;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          5 KWLIQLFHKK 14


RESULT 89
US-09-224-480-92
; Sequence 92, Application US/09224480
; Patent No. 6153730
;  GENERAL INFORMATION:
;    APPLICANT:  Little, Roger G.
;    TITLE OF INVENTION:  Biologically Active Peptides from
;    TITLE OF INVENTION:  Functional Domains of Bactericidal/
;    TITLE OF INVENTION:  Permeability-Increasing Protein and
;    TITLE OF INVENTION:  Uses Thereof
;    NUMBER OF SEQUENCES:  226
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  McAndrews, Held & Malloy, Ltd.
;      STREET:  Suite 3400, 500 West Madison Street
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  USA
;      ZIP:  60661
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/224,480
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/485,445
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/183,222
;      FILING DATE:  14-JAN-1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  McNicholas, Janet M.
;      REGISTRATION NUMBER:  32,918
;      REFERENCE/DOCKET NUMBER:  11018US08/100-224.P4.C1B
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312-707-8889
;      TELEFAX:  312-707-9155
;  INFORMATION FOR SEQ ID NO:  92:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  14 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "BPI.97"
US-09-224-480-92

  Query Match           100.0%;  Score 57;  DB 3;  Length 14;
  Best Local Similarity  100.0%;  Pred. No. 0.002;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          5 KWLIQLFHKK 14


RESULT 90
US-09-093-539-92
; Sequence 92, Application US/09093539
; Patent No. 6228834
;  GENERAL INFORMATION:
;    APPLICANT:  Little, Roger G
;    TITLE OF INVENTION:  Biologically Active Peptides from
;    TITLE OF INVENTION:  Functional Domains of Bactericidal/Permeability-Increasing
;    TITLE OF INVENTION:  Protein and Uses Thereof
;    NUMBER OF SEQUENCES:  98
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Banner & Allegretti, Ltd.
;      STREET:  10  South Wacker Drive, Suite 3000
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  USA
;      ZIP:  60606
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/093,539
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/473,344
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;       FILING DATE:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 08/306,475
;       FILING DATE:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 08/209,762
;       FILING DATE:  11-MAR-1995
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  McDonnell, John J.
;       REGISTRATION NUMBER:  26,949
;       REFERENCE/DOCKET NUMBER:  93,1133-J
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  312-715-1000
;       TELEFAX:  312-715-1234
;       TELEX:  910-221-5317
;   INFORMATION FOR SEQ ID NO:  92:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  14 amino acids
;       TYPE:  amino acid
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  peptide
;     FEATURE:
;       NAME/KEY:  misc_feature
;       OTHER INFORMATION:  "BPI.97"
US-09-093-539-92

  Query Match           100.0%;  Score 57;  DB 3;  Length 14;
  Best Local Similarity  100.0%;  Pred. No. 0.002;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
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Db          5 KWLIQLFHKK 14


RESULT 91
US-09-217-352-86
; Sequence 86, Application US/09217352
; Patent No. 6274344
;  GENERAL INFORMATION:
;    APPLICANT:  Better, Marc D.
;    TITLE OF INVENTION:  Methods for Recombinant Microbial Production of
;    TITLE OF INVENTION:  Fusion Proteins and BPI-Derived Peptides
;    NUMBER OF SEQUENCES:  265
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60606-6402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/217,352
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/521,803
;      FILING DATE:  22-MAR-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Borun, Michael F.
;      REGISTRATION NUMBER:  25,447
;      REFERENCE/DOCKET NUMBER:  27129/33199
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  86:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  14 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.97"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated."
US-09-217-352-86

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  Best Local Similarity  100.0%;  Pred. No. 0.002;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          5 KWLIQLFHKK 14


RESULT 92
US-09-790-230-92
; Sequence 92, Application US/09790230
; Patent No. 6495516
;  GENERAL INFORMATION:
;       APPLICANT: Little, Roger G
;       TITLE OF INVENTION: Biologically Active Peptides from
;                           Functional Domains of Bactericidal/Permeability-Increasi
;                           Protein and Uses Thereof
;       NUMBER OF SEQUENCES: 98
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: Banner & Allegretti, Ltd.
;            STREET: 10  South Wacker Drive, Suite 3000
;            CITY: Chicago
;            STATE: Illinois
;            COUNTRY: USA
;            ZIP: 60606
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Floppy disk
;            COMPUTER: IBM PC compatible
;            OPERATING SYSTEM: PC-DOS/MS-DOS
;            SOFTWARE: PatentIn Release #1.0, Version #1.25
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/09/790,230
;            FILING DATE: 21-Feb-2001
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: 08/473,344
;            FILING DATE: <Unknown>
;       ATTORNEY/AGENT INFORMATION:
;            NAME: McDonnell, John J.
;            REGISTRATION NUMBER: 26,949
;            REFERENCE/DOCKET NUMBER: 93,1133-J
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 312-715-1000
;            TELEFAX: 312-715-1234
;            TELEX: 910-221-5317
;   INFORMATION FOR SEQ ID NO: 92:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 14 amino acids
;            TYPE: amino acid
;            TOPOLOGY: linear
;       MOLECULE TYPE: peptide
;       FEATURE:
;            NAME/KEY: misc_feature
;            OTHER INFORMATION: "BPI.97"
;       SEQUENCE DESCRIPTION: SEQ ID NO: 92:
US-09-790-230-92

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  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
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Db          5 KWLIQLFHKK 14


RESULT 93
PCT-US94-02465-92
; Sequence 92, Application PC/TUS9402465
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  Biologically Active Peptides from
;    TITLE OF INVENTION:  Functional Domains of Bactericidal/Permeability-Increasing
;    TITLE OF INVENTION:  Protein and Uses Thereof
;    NUMBER OF SEQUENCES:  98
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Allegretti & Witcoff, Ltd.
;      STREET:  10 South Wacker Drive, Suite 3000
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  USA
;      ZIP:  60606
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US94/02465
;      FILING DATE:  11-JAN-1994
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Noonan, Kevin E
;      REGISTRATION NUMBER:  35,303
;      REFERENCE/DOCKET NUMBER:  93,1133
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312-715-1000
;      TELEFAX:  312-715-1234
;      TELEX:  910-221-5317
;  INFORMATION FOR SEQ ID NO:  92:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  14 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "BPI.97"
PCT-US94-02465-92

  Query Match             100.0%;  Score 57;  DB 5;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 0.002;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          5 KWLIQLFHKK 14


RESULT 94
PCT-US95-00498-92
; Sequence 92, Application PC/TUS9500498
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  Anti-Gram-Positive Bacterial Methods and
;    TITLE OF INVENTION:  Materials
;    NUMBER OF SEQUENCES:  237
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/00498
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/273,540
;      FILING DATE:  11-JUL-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/209,762
;      FILING DATE:  11-MAR-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/183,222
;      FILING DATE:  14-JAN-1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Rin-Laures, Li-Hsien
;      REGISTRATION NUMBER:  33,547
;      REFERENCE/DOCKET NUMBER:  27129/32415
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  92:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  14 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.97"
PCT-US95-00498-92

  Query Match             100.0%;  Score 57;  DB 5;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 0.002;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          5 KWLIQLFHKK 14


RESULT 95
PCT-US95-00656-92
; Sequence 92, Application PC/TUS9500656
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  Anti-Fungal Materials and Methods
;    NUMBER OF SEQUENCES:  227
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  Patentin Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/00656
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/273,540
;      FILING DATE:  11-JUL-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/209,762
;      FILING DATE:  11-MAR-1994
;    PRIOR APPLICATION DATA:
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;      APPLICATION NUMBER:  08/183,222
;      FILING DATE:  14-JAN-1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Rin-Laures, Li-Hsien
;      REGISTRATION NUMBER:  33,547
;      REFERENCE/DOCKET NUMBER:  27129/32415
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  92:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  14 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.97"
PCT-US95-00656-92

  Query Match           100.0%;  Score 57;  DB 5;  Length 14;
  Best Local Similarity  100.0%;  Pred. No. 0.002;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          5 KWLIQLFHKK 14


RESULT 96
PCT-US95-09262-31
; Sequence 31, Application PC/TUS9509262
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  Anti-Fungal Peptides
;    NUMBER OF SEQUENCES:  206
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60606-6402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/09262
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/372,105
;      FILING DATE:  13-JAN-95
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/306,473
;      FILING DATE:  15-SEP-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/273,540
;      FILING DATE:  11-JUL-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/209,762
;      FILING DATE:  11-MAR-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/183,222
;      FILING DATE:  14-JAN-94
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/093,202
;      FILING DATE:  15-JUL-93
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/030,644
;      FILING DATE:  12-MAR-93
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Borun, Michael F.
;      REGISTRATION NUMBER:  25,447
;      REFERENCE/DOCKET NUMBER:  27129/10040
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  31:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  14 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "XMP.97"
;    FEATURE:
;      NAME/KEY:  Modified-site
;      LOCATION:  C-Terminus
;      OTHER INFORMATION:  /label= Amidation
;      OTHER INFORMATION:  /note= "The C-Terminus is Amidated"
PCT-US95-09262-31

  Query Match           100.0%;  Score 57;  DB 5;  Length 14;
  Best Local Similarity  100.0%;  Pred. No. 0.002;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
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Db          5 KWLIQLFHKK 14


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OM protein - protein search, using sw model

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(without alignments)
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Title: US-09-881-490-126
Perfect score: 57
Sequence: 1 KWLIQLFHKK 10

Scoring table: BLOSUM62
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Searched: 587654 seqs, 158212981 residues

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Minimum DB seq length: 0
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Listing first 65 summaries

Database : Published_Applications_AA:*
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2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	57	100.0	10	9	US-09-765-527-215	Sequence 215, App
3	57	100.0	10	9	US-09-881-490-126	Sequence 126, App
4	57	100.0	10	9	US-09-881-490-194	Sequence 194, App
5	57	100.0	10	9	US-09-881-490-195	Sequence 195, App
6	57	100.0	10	9	US-09-881-490-196	Sequence 196, App
7	57	100.0	10	9	US-09-881-490-197	Sequence 197, App
8	57	100.0	10	9	US-09-881-490-204	Sequence 204, App
9	57	100.0	10	14	US-10-006-557-11	Sequence 11, Appl
10	57	100.0	10	15	US-10-146-136-3	Sequence 3, Appli
11	57	100.0	10	15	US-10-146-136-5	Sequence 5, Appli
12	57	100.0	11	9	US-09-765-527-155	Sequence 155, App
13	57	100.0	11	9	US-09-765-527-208	Sequence 208, App
14	57	100.0	11	9	US-09-881-490-122	Sequence 122, App
15	57	100.0	11	9	US-09-881-490-183	Sequence 183, App
16	57	100.0	12	9	US-09-765-527-152	Sequence 152, App
17	57	100.0	12	9	US-09-881-490-119	Sequence 119, App
18	57	100.0	13	9	US-09-765-527-150	Sequence 150, App
19	57	100.0	13	9	US-09-881-490-117	Sequence 117, App
20	57	100.0	14	9	US-09-765-527-86	Sequence 86, Appl
21	57	100.0	14	9	US-09-881-490-31	Sequence 31, Appl
22	53	93.0	14	9	US-09-765-527-88	Sequence 88, Appl
23	53	93.0	14	9	US-09-881-490-32	Sequence 32, Appl
24	52	91.2	9	9	US-09-765-527-163	Sequence 163, App
25	52	91.2	9	9	US-09-765-527-164	Sequence 164, App
26	52	91.2	9	9	US-09-881-490-130	Sequence 130, App
27	52	91.2	9	9	US-09-881-490-131	Sequence 131, App
28	52	91.2	10	9	US-09-765-527-158	Sequence 158, App
29	52	91.2	10	9	US-09-765-527-209	Sequence 209, App
30	52	91.2	10	9	US-09-765-527-210	Sequence 210, App
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34	52	91.2	10	9	US-09-765-527-227	Sequence 227, App
35	52	91.2	10	9	US-09-881-490-125	Sequence 125, App
36	52	91.2	10	9	US-09-881-490-184	Sequence 184, App
37	52	91.2	10	9	US-09-881-490-185	Sequence 185, App
38	52	91.2	10	9	US-09-881-490-186	Sequence 186, App
39	52	91.2	10	9	US-09-881-490-187	Sequence 187, App
40	52	91.2	10	9	US-09-881-490-188	Sequence 188, App
41	52	91.2	10	9	US-09-881-490-190	Sequence 190, App
42	52	91.2	11	9	US-09-765-527-154	Sequence 154, App
43	52	91.2	11	9	US-09-765-527-225	Sequence 225, App
44	52	91.2	11	9	US-09-765-527-228	Sequence 228, App
45	52	91.2	11	9	US-09-765-527-229	Sequence 229, App
46	52	91.2	11	9	US-09-881-490-121	Sequence 121, App
47	52	91.2	11	9	US-09-881-490-189	Sequence 189, App
48	52	91.2	12	9	US-09-765-527-151	Sequence 151, App
49	52	91.2	12	9	US-09-765-527-230	Sequence 230, App
50	52	91.2	12	9	US-09-765-527-231	Sequence 231, App
51	52	91.2	12	9	US-09-760-397-3	Sequence 3, Appli
52	52	91.2	12	9	US-09-881-490-118	Sequence 118, App
53	52	91.2	12	15	US-10-146-136-4	Sequence 4, Appli
54	52	91.2	13	9	US-09-765-527-12	Sequence 12, Appl
55	52	91.2	13	9	US-09-881-490-2	Sequence 2, Appli
56	52	91.2	14	9	US-09-765-527-14	Sequence 14, Appl
57	52	91.2	14	9	US-09-765-527-32	Sequence 32, Appl
58	52	91.2	14	9	US-09-765-527-33	Sequence 33, Appl
59	52	91.2	14	9	US-09-765-527-34	Sequence 34, Appl
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61	52	91.2	14	9	US-09-765-527-36	Sequence 36, Appl
62	52	91.2	14	9	US-09-765-527-77	Sequence 77, Appl
63	52	91.2	14	9	US-09-765-527-84	Sequence 84, Appl
64	52	91.2	14	9	US-09-765-527-102	Sequence 102, App
65	52	91.2	14	9	US-09-765-527-136	Sequence 136, App

ALIGNMENTS

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RESULT 1
US-09-765-527-159
; Sequence 159, Application US/09765527
; Patent No. US20020006638A1
;  GENERAL INFORMATION:
;       APPLICANT: Better, Marc D.
;       TITLE OF INVENTION: Methods for Recombinant Microbial Production of
;                           Fusion Proteins and BPI-Derived Peptides
;       NUMBER OF SEQUENCES: 265
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
;            STREET: 6300 Sears Tower, 233 South Wacker Drive
;            CITY: Chicago
;            STATE: Illinois
;            COUNTRY: United States of America
;            ZIP: 60606-6402
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Floppy disk
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; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/765,527
; FILING DATE: 18-Jan-2001
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/621,803
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Borun, Michael F.
; REGISTRATION NUMBER: 25,447
; REFERENCE/DOCKET NUMBER: 27129/33199
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 159:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: "XMP.293"
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: C-Terminus
; OTHER INFORMATION: /label= Amidation
; /note= "The C-Terminus is Amidated."
; SEQUENCE DESCRIPTION: SEQ ID NO: 159:
US-09-765-527-159

Query Match 100.0%; Score 57; DB 9; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0021;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 2
US-09-765-527-215
; Sequence 215, Application US/09765527
; Patent No. US20020006638A1
; GENERAL INFORMATION:
; APPLICANT: Better, Marc D.
; TITLE OF INVENTION: Methods for Recombinant Microbial Production of
; Fusion Proteins and BPI-Derived Peptides
; NUMBER OF SEQUENCES: 265
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/765,527
; FILING DATE: 18-Jan-2001
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/621,803
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Borun, Michael F.
; REGISTRATION NUMBER: 25,447
; REFERENCE/DOCKET NUMBER: 27129/33199
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 215:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: "XMP.373"
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: 1
; OTHER INFORMATION: /label= Acetylated
; /note= "Position 1 is acetylated."
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: C-Terminus
; OTHER INFORMATION: /label= Amidation
; /note= "The C-Terminus is Amidated."
; SEQUENCE DESCRIPTION: SEQ ID NO: 215:
US-09-765-527-215

Query Match 100.0%; Score 57; DB 9; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0021;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 1 KWLIQLFHKK 10

RESULT 3
US-09-881-490-126
; Sequence 126, Application US/09881490
; Patent No. US20020077298A1
; GENERAL INFORMATION:
; APPLICANT: Little II, Roger G.
; Lim, Edward
; Fadem, Mitchell B.
; TITLE OF INVENTION: Anti-Fungal Peptides
; NUMBER OF SEQUENCES: 211
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: McAndrews, Held & Malloy, Ltd.
; STREET: 500 West Madison Street, 34th FloorDrive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60661
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/881,490
; FILING DATE: 14-Jun-2001
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/119,858
; FILING DATE: <Unknown>
; APPLICATION NUMBER: 08/372,105
; FILING DATE: 13-JAN-95
; APPLICATION NUMBER: 08/306,473
; FILING DATE: 15-SEP-94
; APPLICATION NUMBER: 08/273,540
; FILING DATE: 11-JUL-94
; APPLICATION NUMBER: 08/209,762
; FILING DATE: 11-MAR-94
; APPLICATION NUMBER: 08/183,222

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;             FILING DATE: 14-JAN-94
;             APPLICATION NUMBER: 08/093,202
;             FILING DATE: 15-JUL-93
;             APPLICATION NUMBER: 08/030,644
;             FILING DATE: 12-MAR-93
;        ATTORNEY/AGENT INFORMATION:
;             NAME: McNicholas, Janet M.
;             REGISTRATION NUMBER: 32,918
;             REFERENCE/DOCKET NUMBER: 100-238/11021US01
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: 312/707-8889
;             TELEFAX: 312/707-9155
;             TELEX: 650 388-1248
;   INFORMATION FOR SEQ ID NO: 126:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 10 amino acids
;             TYPE: amino acid
;             TOPOLOGY: linear
;        MOLECULE TYPE: peptide
;        FEATURE:
;             NAME/KEY:  misc_feature
;             OTHER INFORMATION:  "XMP.293"
;        FEATURE:
;             NAME/KEY:  Modified-site
;             LOCATION:  C-Terminus
;             OTHER INFORMATION:  /label= Amidation
;             /note= "The C-Terminus is Amidated"
;        SEQUENCE DESCRIPTION: SEQ ID NO: 126:
US-09-881-490-126

  Query Match             100.0%;  Score 57;  DB 9;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0021;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 4
US-09-881-490-194
; Sequence 194, Application US/09881490
; Patent No. US20020077298A1
;   GENERAL INFORMATION:
;        APPLICANT: Little II, Roger G.
;                   Lim, Edward
;                   Fadem, Mitchell B.
;        TITLE OF INVENTION: Anti-Fungal Peptides
;        NUMBER OF SEQUENCES: 211
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: McAndrews, Held & Malloy, Ltd.
;             STREET: 500 West Madison Street, 34th FloorDrive
;             CITY: Chicago
;             STATE: Illinois
;             COUNTRY: United States of America
;             ZIP: 60661
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: PatentIn Release #1.0, Version #1.25
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/881,490
;             FILING DATE: 14-Jun-2001
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 09/119,858
;             FILING DATE: <Unknown>
;             APPLICATION NUMBER: 08/372,105
;             FILING DATE: 13-JAN-95
;             APPLICATION NUMBER: 08/306,473
;             FILING DATE: 15-SEP-94
;             APPLICATION NUMBER: 08/273,540
;             FILING DATE: 11-JUL-94
;             APPLICATION NUMBER: 08/209,762
;             FILING DATE: 11-MAR-94
;             APPLICATION NUMBER: 08/183,222
;             FILING DATE: 14-JAN-94
;             APPLICATION NUMBER: 08/093,202
;             FILING DATE: 15-JUL-93
;             APPLICATION NUMBER: 08/030,644
;             FILING DATE: 12-MAR-93
;        ATTORNEY/AGENT INFORMATION:
;             NAME: McNicholas, Janet M.
;             REGISTRATION NUMBER: 32,918
;             REFERENCE/DOCKET NUMBER: 100-238/11021US01
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: 312/707-8889
;             TELEFAX: 312/707-9155
;             TELEX: 650 388-1248
;   INFORMATION FOR SEQ ID NO: 194:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 10 amino acids
;             TYPE: amino acid
;             TOPOLOGY: linear
;        MOLECULE TYPE: peptide
;        FEATURE:
;             NAME/KEY:  misc_feature
;             OTHER INFORMATION:  "XMP.363"
;        FEATURE:
;             NAME/KEY:  Modified-site
;             LOCATION:  1, 9 & 10
;             OTHER INFORMATION:  /label= D-Lys
;             /note= "Positions 1, 9 & 10 are D-lysine."
;        FEATURE:
;             NAME/KEY:  Modified-site
;             LOCATION:  2
;             OTHER INFORMATION:  /label= D-Trp
;             /note= "Position 2 is D-tryptophan."
;        FEATURE:
;             NAME/KEY:  Modified-site
;             LOCATION:  C-Terminus
;             OTHER INFORMATION:  /label= Amidation
;             /note= "The C-Terminus is Amidated"
;        SEQUENCE DESCRIPTION: SEQ ID NO: 194:
US-09-881-490-194

  Query Match             100.0%;  Score 57;  DB 9;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0021;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 5
US-09-881-490-195
; Sequence 195, Application US/09881490
; Patent No. US20020077298A1
;   GENERAL INFORMATION:
;        APPLICANT: Little II, Roger G.
;                   Lim, Edward
;                   Fadem, Mitchell B.
;        TITLE OF INVENTION: Anti-Fungal Peptides
;        NUMBER OF SEQUENCES: 211
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: McAndrews, Held & Malloy, Ltd.
;             STREET: 500 West Madison Street, 34th FloorDrive
;             CITY: Chicago
;             STATE: Illinois
;             COUNTRY: United States of America
;             ZIP: 60661
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
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;           SOFTWARE: PatentIn Release #1.0, Version #1.25
;       CURRENT APPLICATION DATA:
;           APPLICATION NUMBER: US/09/881,490
;           FILING DATE: 14-Jun-2001
;       PRIOR APPLICATION DATA:
;           APPLICATION NUMBER: 09/119,858
;           FILING DATE: <Unknown>
;           APPLICATION NUMBER: 08/372,105
;           FILING DATE: 13-JAN-95
;           APPLICATION NUMBER: 08/306,473
;           FILING DATE: 15-SEP-94
;           APPLICATION NUMBER: 08/273,540
;           FILING DATE: 11-JUL-94
;           APPLICATION NUMBER: 08/209,762
;           FILING DATE: 11-MAR-94
;           APPLICATION NUMBER: 08/183,222
;           FILING DATE: 14-JAN-94
;           APPLICATION NUMBER: 08/093,202
;           FILING DATE: 15-JUL-93
;           APPLICATION NUMBER: 08/030,644
;           FILING DATE: 12-MAR-93
;       ATTORNEY/AGENT INFORMATION:
;           NAME: McNicholas, Janet M.
;           REGISTRATION NUMBER: 32,918
;           REFERENCE/DOCKET NUMBER: 100-238/11021US01
;       TELECOMMUNICATION INFORMATION:
;           TELEPHONE: 312/707-8889
;           TELEFAX: 312/707-9155
;           TELEX: 650 388-1248
;   INFORMATION FOR SEQ ID NO: 195:
;       SEQUENCE CHARACTERISTICS:
;           LENGTH: 10 amino acids
;           TYPE: amino acid
;           TOPOLOGY: linear
;       MOLECULE TYPE: peptide
;       FEATURE:
;           NAME/KEY:  misc_feature
;           OTHER INFORMATION:  "XMP.364"
;       FEATURE:
;           NAME/KEY:  Modified-site
;           LOCATION:  1
;           OTHER INFORMATION:  /label= Acetylated
;           /note= "Position 1 is acetylated"
;       FEATURE:
;           NAME/KEY:  Modified-site
;           LOCATION:  1, 9 & 10
;           OTHER INFORMATION:  /label= D-Lys
;           /note= "Positions 1, 9 & 10 are D-lysine."
;       FEATURE:
;           NAME/KEY:  Modified-site
;           LOCATION:  2
;           OTHER INFORMATION:  /label= D-Trp
;           /note= "Position 2 is D-tryptophan."
;       FEATURE:
;           NAME/KEY:  Modified-site
;           LOCATION:  C-Terminus
;           OTHER INFORMATION:  /label= Amidation
;           /note= "The C-Terminus is Amidated"
;       SEQUENCE DESCRIPTION: SEQ ID NO: 195:
US-09-881-490-195

  Query Match             100.0%;  Score 57;  DB 9;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0021;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||:|||
Db          1 KWLIQLFHKK 10


RESULT 6
US-09-881-490-196
; Sequence 196, Application US/09881490
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; Patent No. US20020077298A1
;   GENERAL INFORMATION:
;       APPLICANT: Little II, Roger G.
;                  Lim, Edward
;                  Fadem, Mitchell B.
;       TITLE OF INVENTION: Anti-Fungal Peptides
;       NUMBER OF SEQUENCES: 211
;       CORRESPONDENCE ADDRESS:
;           ADDRESSEE: McAndrews, Held & Malloy, Ltd.
;           STREET: 500 West Madison Street, 34th FloorDrive
;           CITY: Chicago
;           STATE: Illinois
;           COUNTRY: United States of America
;           ZIP: 60661
;       COMPUTER READABLE FORM:
;           MEDIUM TYPE: Floppy disk
;           COMPUTER: IBM PC compatible
;           OPERATING SYSTEM: PC-DOS/MS-DOS
;           SOFTWARE: PatentIn Release #1.0, Version #1.25
;       CURRENT APPLICATION DATA:
;           APPLICATION NUMBER: US/09/881,490
;           FILING DATE: 14-Jun-2001
;       PRIOR APPLICATION DATA:
;           APPLICATION NUMBER: 09/119,858
;           FILING DATE: <Unknown>
;           APPLICATION NUMBER: 08/372,105
;           FILING DATE: 13-JAN-95
;           APPLICATION NUMBER: 08/306,473
;           FILING DATE: 15-SEP-94
;           APPLICATION NUMBER: 08/273,540
;           FILING DATE: 11-JUL-94
;           APPLICATION NUMBER: 08/209,762
;           FILING DATE: 11-MAR-94
;           APPLICATION NUMBER: 08/183,222
;           FILING DATE: 14-JAN-94
;           APPLICATION NUMBER: 08/093,202
;           FILING DATE: 15-JUL-93
;           APPLICATION NUMBER: 08/030,644
;           FILING DATE: 12-MAR-93
;       ATTORNEY/AGENT INFORMATION:
;           NAME: McNicholas, Janet M.
;           REGISTRATION NUMBER: 32,918
;           REFERENCE/DOCKET NUMBER: 100-238/11021US01
;       TELECOMMUNICATION INFORMATION:
;           TELEPHONE: 312/707-8889
;           TELEFAX: 312/707-9155
;           TELEX: 650 388-1248
;   INFORMATION FOR SEQ ID NO: 196:
;       SEQUENCE CHARACTERISTICS:
;           LENGTH: 10 amino acids
;           TYPE: amino acid
;           TOPOLOGY: linear
;       MOLECULE TYPE: peptide
;       FEATURE:
;           NAME/KEY:  misc_feature
;           OTHER INFORMATION:  "XMP.365"
;       FEATURE:
;           NAME/KEY:  Modified-site
;           LOCATION:  1-10
;           OTHER INFORMATION:  /label= D-Amino Acids
;           /note= "Positions 1-10 are D-amino acids"
;       FEATURE:
;           NAME/KEY:  Modified-site
;           LOCATION:  C-Terminus
;           OTHER INFORMATION:  /label= Amidation
;           /note= "The C-Terminus is Amidated"
;       SEQUENCE DESCRIPTION: SEQ ID NO: 196:
US-09-881-490-196

  Query Match             100.0%;  Score 57;  DB 9;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0021;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
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Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 7
US-09-881-490-197
; Sequence 197, Application US/09881490
; Patent No. US20020077298A1
;   GENERAL INFORMATION:
;        APPLICANT: Little II, Roger G.
;                   Lim, Edward
;                   Fadem, Mitchell B.
;        TITLE OF INVENTION: Anti-Fungal Peptides
;        NUMBER OF SEQUENCES: 211
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: McAndrews, Held & Malloy, Ltd.
;             STREET: 500 West Madison Street, 34th FloorDrive
;             CITY: Chicago
;             STATE: Illinois
;             COUNTRY: United States of America
;             ZIP: 60661
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: PatentIn Release #1.0, Version #1.25
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/881,490
;             FILING DATE: 14-Jun-2001
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 09/119,858
;             FILING DATE: <Unknown>
;             APPLICATION NUMBER: 08/372,105
;             FILING DATE: 13-JAN-95
;             APPLICATION NUMBER: 08/306,473
;             FILING DATE: 15-SEP-94
;             APPLICATION NUMBER: 08/273,540
;             FILING DATE: 11-JUL-94
;             APPLICATION NUMBER: 08/209,762
;             FILING DATE: 11-MAR-94
;             APPLICATION NUMBER: 08/183,222
;             FILING DATE: 14-JAN-94
;             APPLICATION NUMBER: 08/093,202
;             FILING DATE: 15-JUL-93
;             APPLICATION NUMBER: 08/030,644
;             FILING DATE: 12-MAR-93
;        ATTORNEY/AGENT INFORMATION:
;             NAME: McNicholas, Janet M.
;             REGISTRATION NUMBER: 32,918
;             REFERENCE/DOCKET NUMBER: 100-238/11021US01
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: 312/707-8889
;             TELEFAX: 312/707-9155
;             TELEX: 650 388-1248
;   INFORMATION FOR SEQ ID NO: 197:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 10 amino acids
;             TYPE: amino acid
;             TOPOLOGY: linear
;        MOLECULE TYPE: peptide
;        FEATURE:
;             NAME/KEY:  misc_feature
;             OTHER INFORMATION:  "XMP.366"
;        FEATURE:
;             NAME/KEY:  Modified-site
;             LOCATION:  1
;             OTHER INFORMATION:  /label= Acetylated
;             /note= "Position 1 is acetylated"
;        FEATURE:
;             NAME/KEY:  Modified-site
;             LOCATION:  1-10
;             OTHER INFORMATION:  /label= D-Amino Acids
;             /note= "Positions 1-10 are D-amino acids"
;        FEATURE:
;             NAME/KEY:  Modified-site
;             LOCATION:  C-Terminus
;             OTHER INFORMATION:  /label= Amidation
;             /note= "The C-Terminus is Amidated"
;        SEQUENCE DESCRIPTION: SEQ ID NO: 197:
US-09-881-490-197

  Query Match             100.0%;  Score 57;  DB 9;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0021;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 8
US-09-881-490-204
; Sequence 204, Application US/09881490
; Patent No. US20020077298A1
;   GENERAL INFORMATION:
;        APPLICANT: Little II, Roger G.
;                   Lim, Edward
;                   Fadem, Mitchell B.
;        TITLE OF INVENTION: Anti-Fungal Peptides
;        NUMBER OF SEQUENCES: 211
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: McAndrews, Held & Malloy, Ltd.
;             STREET: 500 West Madison Street, 34th FloorDrive
;             CITY: Chicago
;             STATE: Illinois
;             COUNTRY: United States of America
;             ZIP: 60661
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: PatentIn Release #1.0, Version #1.25
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/881,490
;             FILING DATE: 14-Jun-2001
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 09/119,858
;             FILING DATE: <Unknown>
;             APPLICATION NUMBER: 08/372,105
;             FILING DATE: 13-JAN-95
;             APPLICATION NUMBER: 08/306,473
;             FILING DATE: 15-SEP-94
;             APPLICATION NUMBER: 08/273,540
;             FILING DATE: 11-JUL-94
;             APPLICATION NUMBER: 08/209,762
;             FILING DATE: 11-MAR-94
;             APPLICATION NUMBER: 08/183,222
;             FILING DATE: 14-JAN-94
;             APPLICATION NUMBER: 08/093,202
;             FILING DATE: 15-JUL-93
;             APPLICATION NUMBER: 08/030,644
;             FILING DATE: 12-MAR-93
;        ATTORNEY/AGENT INFORMATION:
;             NAME: McNicholas, Janet M.
;             REGISTRATION NUMBER: 32,918
;             REFERENCE/DOCKET NUMBER: 100-238/11021US01
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: 312/707-8889
;             TELEFAX: 312/707-9155
;             TELEX: 650 388-1248
;   INFORMATION FOR SEQ ID NO: 204:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 10 amino acids
;             TYPE: amino acid
;             TOPOLOGY: linear
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;       MOLECULE TYPE: peptide
;       FEATURE:
;            NAME/KEY:  misc_feature
;            OTHER INFORMATION:  "XMP.373"
;       FEATURE:
;            NAME/KEY:  Modified-site
;            LOCATION:  1
;            OTHER INFORMATION:  /label= Acetylated
;            /note= "Position 1 is acetylated"
;       FEATURE:
;            NAME/KEY:  Modified-site
;            LOCATION:  C-Terminus
;            OTHER INFORMATION:  /label= Amidation
;            /note= "The C-Terminus is Amidated"
;       SEQUENCE DESCRIPTION: SEQ ID NO: 204:
US-09-881-490-204

  Query Match             100.0%;  Score 57;  DB 9;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0021;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 9
US-10-006-557-11
; Sequence 11, Application US/10006557
; Publication No. US20020173464A1
; GENERAL INFORMATION:
;  APPLICANT: King, George L.
;  APPLICANT:  Abrahamson, Susan
;  APPLICANT:  Pugsley, Michael
;  TITLE OF INVENTION: Modulation of Pericyte Proliferation
;  FILE REFERENCE: 27129/36739A
;  CURRENT APPLICATION NUMBER: US/10/006,557
;  CURRENT FILING DATE:  2001-12-03
;  PRIOR APPLICATION NUMBER: 60/250,542
;  PRIOR FILING DATE: 2000-12-01
;  NUMBER OF SEQ ID NOS: 15
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 11
;   LENGTH: 10
;   TYPE: PRT
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: MISC_FEATURE
;   OTHER INFORMATION: XMP.365
;   NAME/KEY: SITE
;   LOCATION: (1)..(10)
;   OTHER INFORMATION: Positions 1-10 are D-amino acids
;   NAME/KEY: SITE
;   LOCATION: (10)..(10)
;   OTHER INFORMATION: AMIDATION=The C-terminus is Amidated
US-10-006-557-11

  Query Match             100.0%;  Score 57;  DB 14;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0021;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 10
US-10-146-136-3
; Sequence 3, Application US/10146136
; Publication No. US20030114485A1
; GENERAL INFORMATION:
;  APPLICANT: Little, II, Roger G.
;  TITLE OF INVENTION: IDENTIFICAITON OF NOVEL ANTIMICROBIAL AGENTS USING
;  TITLE OF INVENTION:  METABOLIC OXIDATION-REDUCTION INDICATOR DYES
;  FILE REFERENCE: 27129/36226
;  CURRENT APPLICATION NUMBER: US/10/146,136
;  CURRENT FILING DATE:  2002-05-16
;  PRIOR APPLICATION NUMBER: 60/143,290
;  PRIOR FILING DATE: 1999-07-12
;  NUMBER OF SEQ ID NOS: 6
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
;   LENGTH: 10
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: artificial
;   OTHER INFORMATION: peptide XMP.365
;   FEATURE:
;   NAME/KEY: SITE
;   LOCATION: (1)..(10)
;   OTHER INFORMATION: Positions 1-10 are D-amino acids
;   FEATURE:
;   OTHER INFORMATION: The C-Terminus is Amidated
US-10-146-136-3

  Query Match             100.0%;  Score 57;  DB 15;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0021;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10


RESULT 11
US-10-146-136-5
; Sequence 5, Application US/10146136
; Publication No. US20030114485A1
; GENERAL INFORMATION:
;  APPLICANT: Little, II, Roger G.
;  TITLE OF INVENTION: IDENTIFICAITON OF NOVEL ANTIMICROBIAL AGENTS USING
;  TITLE OF INVENTION:  METABOLIC OXIDATION-REDUCTION INDICATOR DYES
;  FILE REFERENCE: 27129/36226
;  CURRENT APPLICATION NUMBER: US/10/146,136
;  CURRENT FILING DATE:  2002-05-16
;  PRIOR APPLICATION NUMBER: 60/143,290
;  PRIOR FILING DATE: 1999-07-12
;  NUMBER OF SEQ ID NOS: 6
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 5
;   LENGTH: 10
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: artificial
;   OTHER INFORMATION: peptide XMP.416
;   FEATURE:
;   NAME/KEY: SITE
;   LOCATION: (1)..(10)
;   OTHER INFORMATION: Positions 1-10 are D-amino acids
;   FEATURE:
;   OTHER INFORMATION: The C-Terminus is Amidated
;   FEATURE:
;   OTHER INFORMATION: 8-amino-octanyl group; NH2-(CH2)7-CO at N-Terminus
US-10-146-136-5

  Query Match             100.0%;  Score 57;  DB 15;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 0.0021;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          1 KWLIQLFHKK 10
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RESULT 12
US-09-765-527-155
; Sequence 155, Application US/09765527
; Patent No. US20020006638A1
; GENERAL INFORMATION:
; APPLICANT: Better, Marc D.
; TITLE OF INVENTION: Methods for Recombinant Microbial Production of
; Fusion Proteins and BPI-Derived Peptides
; NUMBER OF SEQUENCES: 265
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/765,527
; FILING DATE: 18-Jan-2001
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/621,803
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Borun, Michael F.
; REGISTRATION NUMBER: 25,447
; REFERENCE/DOCKET NUMBER: 27129/33199
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 155:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 11 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: "XMP.269"
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: C-Terminus
; OTHER INFORMATION: /label= Amidation
; /note= "The C-Terminus is Amidated."
; SEQUENCE DESCRIPTION: SEQ ID NO: 155:
US-09-765-527-155

Query Match 100.0%; Score 57; DB 9; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.0023;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 2 KWLIQLFHKK 11

RESULT 13
US-09-765-527-208
; Sequence 208, Application US/09765527
; Patent No. US20020006638A1
; GENERAL INFORMATION:
; APPLICANT: Better, Marc D.
; TITLE OF INVENTION: Methods for Recombinant Microbial Production of
; Fusion Proteins and BPI-Derived Peptides
; NUMBER OF SEQUENCES: 265
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 6300 Sears Tower, 233 South Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/765,527
; FILING DATE: 18-Jan-2001
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/621,803
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Borun, Michael F.
; REGISTRATION NUMBER: 25,447
; REFERENCE/DOCKET NUMBER: 27129/33199
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312/474-6300
; TELEFAX: 312/474-0448
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 208:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 11 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: "XMP.352"
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: C-Terminus
; OTHER INFORMATION: /label= Amidation
; /note= "The C-Terminus is Amidated."
; SEQUENCE DESCRIPTION: SEQ ID NO: 208:
US-09-765-527-208

Query Match 100.0%; Score 57; DB 9; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.0023;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KWLIQLFHKK 10
||||||||||
Db 2 KWLIQLFHKK 11

RESULT 14
US-09-881-490-122
; Sequence 122, Application US/09881490
; Patent No. US20020077298A1
; GENERAL INFORMATION:
; APPLICANT: Little II, Roger G.
; Lim, Edward
; Fadem, Mitchell B.
; TITLE OF INVENTION: Anti-Fungal Peptides
; NUMBER OF SEQUENCES: 211
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: McAndrews, Held & Malloy, Ltd.
; STREET: 500 West Madison Street, 34th FloorDrive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: United States of America
; ZIP: 60661
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/881,490

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;           FILING DATE: 14-Jun-2001
;      PRIOR APPLICATION DATA:
;           APPLICATION NUMBER: 09/119,858
;           FILING DATE: <Unknown>
;           APPLICATION NUMBER: 08/372,105
;           FILING DATE: 13-JAN-95
;           APPLICATION NUMBER: 08/306,473
;           FILING DATE: 15-SEP-94
;           APPLICATION NUMBER: 08/273,540
;           FILING DATE: 11-JUL-94
;           APPLICATION NUMBER: 08/209,762
;           FILING DATE: 11-MAR-94
;           APPLICATION NUMBER: 08/183,222
;           FILING DATE: 14-JAN-94
;           APPLICATION NUMBER: 08/093,202
;           FILING DATE: 15-JUL-93
;           APPLICATION NUMBER: 08/030,644
;           FILING DATE: 12-MAR-93
;      ATTORNEY/AGENT INFORMATION:
;           NAME: McNicholas, Janet M.
;           REGISTRATION NUMBER: 32,918
;           REFERENCE/DOCKET NUMBER: 100-238/110210S01
;      TELECOMMUNICATION INFORMATION:
;           TELEPHONE: 312/707-8889
;           TELEFAX: 312/707-9155
;           TELEX: 650 388-1248
;  INFORMATION FOR SEQ ID NO: 122:
;      SEQUENCE CHARACTERISTICS:
;           LENGTH: 11 amino acids
;           TYPE: amino acid
;           TOPOLOGY: linear
;      MOLECULE TYPE: peptide
;      FEATURE:
;           NAME/KEY:  misc_feature
;           OTHER INFORMATION:  "XMP.289"
;      FEATURE:
;           NAME/KEY:  Modified-site
;           LOCATION:  C-Terminus
;           OTHER INFORMATION:  /label= Amidation
;           /note= "The C-Terminus is Amidated"
;      SEQUENCE DESCRIPTION: SEQ ID NO: 122:
US-09-881-490-122

  Query Match             100.0%;  Score 57;  DB 9;  Length 11;
  Best Local Similarity   100.0%;  Pred. No. 0.0023;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          2 KWLIQLFHKK 11


RESULT 15
US-09-881-490-183
; Sequence 183, Application US/09881490
; Patent No. US20020077298A1
;   GENERAL INFORMATION:
;      APPLICANT: Little II, Roger G.
;                 Lim, Edward
;                 Fadem, Mitchell B.
;      TITLE OF INVENTION: Anti-Fungal Peptides
;      NUMBER OF SEQUENCES: 211
;      CORRESPONDENCE ADDRESS:
;           ADDRESSEE: McAndrews, Held & Malloy, Ltd.
;           STREET: 500 West Madison Street, 34th FloorDrive
;           CITY: Chicago
;           STATE: Illinois
;           COUNTRY: United States of America
;           ZIP: 60661
;      COMPUTER READABLE FORM:
;           MEDIUM TYPE: Floppy disk
;           COMPUTER: IBM PC compatible
;           OPERATING SYSTEM: PC-DOS/MS-DOS
;           SOFTWARE: PatentIn Release #1.0, Version #1.25
;      CURRENT APPLICATION DATA:
;           APPLICATION NUMBER: US/09/881,490
;           FILING DATE: 14-Jun-2001
;      PRIOR APPLICATION DATA:
;           APPLICATION NUMBER: 09/119,858
;           FILING DATE: <Unknown>
;           APPLICATION NUMBER: 08/372,105
;           FILING DATE: 13-JAN-95
;           APPLICATION NUMBER: 08/306,473
;           FILING DATE: 15-SEP-94
;           APPLICATION NUMBER: 08/273,540
;           FILING DATE: 11-JUL-94
;           APPLICATION NUMBER: 08/209,762
;           FILING DATE: 11-MAR-94
;           APPLICATION NUMBER: 08/183,222
;           FILING DATE: 14-JAN-94
;           APPLICATION NUMBER: 08/093,202
;           FILING DATE: 15-JUL-93
;           APPLICATION NUMBER: 08/030,644
;           FILING DATE: 12-MAR-93
;      ATTORNEY/AGENT INFORMATION:
;           NAME: McNicholas, Janet M.
;           REGISTRATION NUMBER: 32,918
;           REFERENCE/DOCKET NUMBER: 100-238/110210S01
;      TELECOMMUNICATION INFORMATION:
;           TELEPHONE: 312/707-8889
;           TELEFAX: 312/707-9155
;           TELEX: 650 388-1248
;  INFORMATION FOR SEQ ID NO: 183:
;      SEQUENCE CHARACTERISTICS:
;           LENGTH: 11 amino acids
;           TYPE: amino acid
;           TOPOLOGY: linear
;      MOLECULE TYPE: peptide
;      FEATURE:
;           NAME/KEY:  misc_feature
;           OTHER INFORMATION:  "XMP.352"
;      FEATURE:
;           NAME/KEY:  Modified-site
;           LOCATION:  C-Terminus
;           OTHER INFORMATION:  /label= Amidation
;           /note= "The C-Terminus is Amidated"
;      SEQUENCE DESCRIPTION: SEQ ID NO: 183:
US-09-881-490-183

  Query Match             100.0%;  Score 57;  DB 9;  Length 11;
  Best Local Similarity   100.0%;  Pred. No. 0.0023;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          2 KWLIQLFHKK 11


RESULT 16
US-09-765-527-152
; Sequence 152, Application US/09765527
; Patent No. US20020006638A1
;   GENERAL INFORMATION:
;      APPLICANT: Better, Marc D.
;      TITLE OF INVENTION: Methods for Recombinant Microbial Production of
;                          Fusion Proteins and BPI-Derived Peptides
;      NUMBER OF SEQUENCES: 265
;      CORRESPONDENCE ADDRESS:
;           ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
;           STREET: 6300 Sears Tower, 233 South Wacker Drive
;           CITY: Chicago
;           STATE: Illinois
;           COUNTRY: United States of America
;           ZIP: 60606-6402
;      COMPUTER READABLE FORM:
;           MEDIUM TYPE: Floppy disk
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;           COMPUTER: IBM PC compatible
;           OPERATING SYSTEM: PC-DOS/MS-DOS
;           SOFTWARE: PatentIn Release #1.0, Version #1.25
;       CURRENT APPLICATION DATA:
;           APPLICATION NUMBER: US/09/765,527
;           FILING DATE: 18-Jan-2001
;       PRIOR APPLICATION DATA:
;           APPLICATION NUMBER: 08/621,803
;           FILING DATE: <Unknown>
;       ATTORNEY/AGENT INFORMATION:
;           NAME: Borun, Michael F.
;           REGISTRATION NUMBER: 25,447
;           REFERENCE/DOCKET NUMBER: 27129/33199
;       TELECOMMUNICATION INFORMATION:
;           TELEPHONE: 312/474-6300
;           TELEFAX: 312/474-0448
;           TELEX: 25-3856
;   INFORMATION FOR SEQ ID NO: 152:
;       SEQUENCE CHARACTERISTICS:
;           LENGTH: 12 amino acids
;           TYPE: amino acid
;           TOPOLOGY: linear
;       MOLECULE TYPE: peptide
;       FEATURE:
;           NAME/KEY:  misc_feature
;           OTHER INFORMATION:  "XMP.286"
;       FEATURE:
;           NAME/KEY:  Modified-site
;           LOCATION:  C-Terminus
;           OTHER INFORMATION:  /label= Amidation
;           /note= "The C-Terminus is Amidated."
;       SEQUENCE DESCRIPTION: SEQ ID NO: 152:
US-09-765-527-152

  Query Match             100.0%;  Score 57;  DB 9;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 0.0025;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||||||||||
Db          3 KWLIQLFHKK 12


RESULT 17
US-09-881-490-119
; Sequence 119, Application US/09881490
; Patent No. US20020077298A1
;   GENERAL INFORMATION:
;       APPLICANT: Little II, Roger G.
;                  Lim, Edward
;                  Fadem, Mitchell B.
;       TITLE OF INVENTION: Anti-Fungal Peptides
;       NUMBER OF SEQUENCES: 211
;       CORRESPONDENCE ADDRESS:
;           ADDRESSEE: McAndrews, Held & Malloy, Ltd.
;           STREET: 500 West Madison Street, 34th FloorDrive
;           CITY: Chicago
;           STATE: Illinois
;           COUNTRY: United States of America
;           ZIP: 60661
;       COMPUTER READABLE FORM:
;           MEDIUM TYPE: Floppy disk
;           COMPUTER: IBM PC compatible
;           OPERATING SYSTEM: PC-DOS/MS-DOS
;           SOFTWARE: PatentIn Release #1.0, Version #1.25
;       CURRENT APPLICATION DATA:
;           APPLICATION NUMBER: US/09/881,490
;           FILING DATE: 14-Jun-2001
;       PRIOR APPLICATION DATA:
;           APPLICATION NUMBER: 09/119,858
;           FILING DATE: <Unknown>
;           APPLICATION NUMBER: 08/372,105
;           FILING DATE: 13-JAN-95
;           APPLICATION NUMBER: 08/306,473
;           FILING DATE: 15-SEP-94
;           APPLICATION NUMBER: 08/273,540
;           FILING DATE: 11-JUL-94
;           APPLICATION NUMBER: 08/209,762
;           FILING DATE: 11-MAR-94
;           APPLICATION NUMBER: 08/183,222
;           FILING DATE: 14-JAN-94
;           APPLICATION NUMBER: 08/093,202
;           FILING DATE: 15-JUL-93
;           APPLICATION NUMBER: 08/030,644
;           FILING DATE: 12-MAR-93
;       ATTORNEY/AGENT INFORMATION:
;           NAME: McNicholas, Janet M.
;           REGISTRATION NUMBER: 32,918
;           REFERENCE/DOCKET NUMBER: 100-238/11021US01
;       TELECOMMUNICATION INFORMATION:
;           TELEPHONE: 312/707-8889
;           TELEFAX: 312/707-9155
;           TELEX: 650 388-1248
;   INFORMATION FOR SEQ ID NO: 119:
;       SEQUENCE CHARACTERISTICS:
;           LENGTH: 12 amino acids
;           TYPE: amino acid
;           TOPOLOGY: linear
;       MOLECULE TYPE: peptide
;       FEATURE:
;           NAME/KEY:  misc_feature
;           OTHER INFORMATION:  "XMP.286"
;       FEATURE:
;           NAME/KEY:  Modified-site
;           LOCATION:  C-Terminus
;           OTHER INFORMATION:  /label= Amidation
;           /note= "The C-Terminus is Amidated"
;       SEQUENCE DESCRIPTION: SEQ ID NO: 119:
US-09-881-490-119

  Query Match             100.0%;  Score 57;  DB 9;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 0.0025;
  Matches   10;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 KWLIQLFHKK 10
              ||:||||:||
Db          3 KWLIQLFHKK 12


RESULT 18
US-09-765-527-150
; Sequence 150, Application US/09765527
; Patent No. US20020006638A1
;   GENERAL INFORMATION:
;       APPLICANT: Better, Marc D.
;       TITLE OF INVENTION: Methods for Recombinant Microbial Production of
;                           Fusion Proteins and BPI-Derived Peptides
;       NUMBER OF SEQUENCES: 265
;       CORRESPONDENCE ADDRESS:
;           ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
;           STREET: 6300 Sears Tower, 233 South Wacker Drive
;           CITY: Chicago
;           STATE: Illinois
;           COUNTRY: United States of America
;           ZIP: 60606-6402
;       COMPUTER READABLE FORM:
;           MEDIUM TYPE: Floppy disk
;           COMPUTER: IBM PC compatible
;           OPERATING SYSTEM: PC-DOS/MS-DOS
;           SOFTWARE: PatentIn Release #1.0, Version #1.25
;       CURRENT APPLICATION DATA:
;           APPLICATION NUMBER: US/09/765,527
;           FILING DATE: 18-Jan-2001
;       PRIOR APPLICATION DATA:
;           APPLICATION NUMBER: 08/621,803
;           FILING DATE: <Unknown>
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